

Exhibit 4

Exhibit 4 U.S. Patent No. 9,057,649 (“’649 Patent”)

Accused Products/Instrumentalities: Resideo’s smart thermostats (e.g., Resideo T5 Pro Smart Thermostat, Resideo T6 Pro Smart Thermostat, Resideo T9 Smart Thermostat, Resideo T10 Pro Smart Thermostat, WiFi Color Touchscreen Thermostat, WiFi Programmable Smart Thermostat, The Round Smart Thermostat, WiFi 9000 Color Touchscreen Thermostat), Resideo’s backend servers, backend-supported software features or services (e.g., Resideo Energy Care, Resideo Cloud Technology, Connected Savings, energy programs with utilities) online interfaces, and mobile applications (e.g., Honeywell Home app, Total Connect app, Resideo app—all of which may be referred to herein as “Resideo mobile app”), and all versions and variations thereof since the issuance of the asserted patent.

Asserted Claims: Claims 1-14

Claim 1

Issued Claim(s)	Public Documentation
1[pre]. A system for evaluating changes in the operational efficiency of an HVAC system over time comprising:	<p>To the extent the preamble is deemed limiting, the Accused Products include a system for evaluating changes in the operational efficiency of an heating, ventilation, and air conditioning (HVAC) system over time.</p> <p>In cases involving EcoFactor, Inc. patents in the U.S. District Court for the Western District of Texas (<i>e.g.</i>, Case No. 6:22-cv-00033-ADA) and in the U.S. District Court for the District of Delaware (<i>e.g.</i>, Case No. 1:21-cv-00323-MN), the term “operational efficiency” was construed as “energy or time required by the HVAC system to change inside temperature by a given amount for a set of indoor and outdoor conditions.”</p> <p>For example, the Accused Products include one or more Resideo-branded thermostats supported by Resideo’s backend servers, related online interfaces, related accessories, and related mobile applications. The Accused Products/Instrumentalities includes features of the smart thermostats, such as Resideo Energy Care provided with Resideo Cloud Technology, and/or Connected Savings and/or other energy features. The Accused Products/Instrumentalities correspond to a system for evaluating changes in the operational efficiency of the HVAC system to which the thermostat is connected.</p>

For example, as shown below, the Accused Products include Resideo-branded thermostat systems that allow for an evaluation of the time or energy required for an HVAC system to change the inside temperature given a set of indoor and outdoor conditions, among other features. The Resideo smart thermostat is installed, and connects to the Resideo Energy Care subscription service and Resideo Cloud Technology. See, e.g., www.resideo.com/us/en/energy-care/ (“Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year...Energy Care pays attention to your home and how you’re using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers...Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we’re saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It’s always prepared – even when the weather takes a sudden turn...Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”). As described by Resideo, Energy Care causes “your energy use [to] become more efficient than ever.” That is because Energy Care depends on “state-of-the-art AI algorithms.” The Energy Care feature evaluates changes in the operational efficiency of the HVAC system, such as using the Home Thermodynamic technology which models the home and HVAC system, which learns the energy or time required by the HVAC system to change inside temperatures in response to outside temperatures over time. This permits Energy Care to make the system more energy efficient by reducing energy usage by reducing / optimizing more efficient HVAC runtimes, which directly reduces the energy consumed by the HVAC system and/or the energy costs. Energy Care not only runs the HVAC system at more efficient temperatures but also uses the thermodynamic model and weather data to calculate efficient setpoints that result in efficient usage given that specific home and HVAC system (e.g., pre-heating, heating, pre-cooling, or cooling an efficient amount, instead of a wasteful amount of too much or too little). The user has the option to select for savings or comfort. If the user selects for

savings, Energy Care can deliver a more energy efficient HVAC runtime. If the user opts for comfort, Energy Care can improve user comfort in view of the efficiency of the HVAC system in terms of the time it requires to precool or preheat the structure. The values for operational efficiency calculated with the Energy Care Home Thermodynamic technology include, *inter alia*, the HVAC runtime required to change inside temperature by a given amount for a set of indoor and outdoor conditions (e.g., the latest indoor and outdoor temperature data received from the thermostat or the weather service, respectively). They also include, *inter alia*, the energy values shown in the graphs of energy consumption with and without energy care on the Energy Care website. They also include, *inter alia*, the HVAC energy savings metrics generated with Energy Care. Energy Care sends optimized thermostat schedules to participating thermostats each day that are based on a custom energy model of the home. The ongoing updating of the custom energy model, and/or its use to evaluate changes in HVAC runtimes, energy usage, etc. also correspond to evaluating changes in the operational efficiency of the HVAC system. The Energy Care model uses temperature and/or runtime and/or HVAC “on” / “off” status data from the connected thermostat as well as “hyperlocal weather data” to develop a custom energy model of the home to understand how it responds to varying weather conditions or use of the HVAC system, and it can predict how the home will respond and how much energy the system will require given an input set of indoor and outdoor temperatures, as well as how this changes over time, and this shows evaluating changes in the operational efficiency of the HVAC system generated with Energy Care that requires *inter alia* “for a set of indoor and outdoor conditions.” Resideo Energy Care also “recalculates settings on-the-fly if the weather develops differently than forecasted.”

Energy Care optimizes operational efficiency by recommending custom pre-cool or pre-heating schedules for each home, determining the extent to which homes and HVAC systems with better insulation will have different operational efficiency than homes and HVAC systems with worse insulation. Similarly, Energy Care’s custom energy model will learn about how efficient the HVAC system performs and operates in the real-world, and how that changes over time, in contrast to its theoretical efficiency.

To the extent Resideo disputes infringement, there would also be infringement under the doctrine of equivalents, because Resideo’s Accused Instrumentalities perform the same function of evaluating changes in the energy or time required by the HVAC system to change inside

temperature by a given amount for a set of indoor and outdoor conditions in substantially the same way, by using the Resideo Energy Care Thermodynamic model and/or custom energy model to model the thermodynamic properties of the home and HVAC system, which allows for understanding and predicting how much time the HVAC system will require to change inside temperatures in response to outside temperatures, and/or generating pre-cooling or pre-heating strategies based on the model's computed values, and/or generating energy efficiency graphs and metrics based on the energy model showing changes over time, which achieves substantially the same result of calculating how efficient the HVAC system is at changing inside temperatures in response to outside temperatures and evaluating changes in operational efficiency of the HVAC system in order to track and optimize efficiency.

The Accused Products include certain Resideo-branded and Honeywell Home-branded smart thermostats. The charts below may show evidence relating to the T10 or T9 as exemplary products that are representative of all of the Accused Products. In their normal and intended operation, the Accused Products constitute a thermostat system that controls the user's HVAC system. They are configured to send signals to control the user's HVAC system. The normal and intended operation of the Accused Products involves connecting them to the relays that control the HVAC system and to the Resideo cloud or backend systems, and the Accused Products are configured to receive signals from the Resideo or Honeywell Home mobile application(s) on the user's location-aware mobile device. Based on currently available information, there are no differences between different versions of Accused Product that are material for purposes of infringement of the claimed system.

Resideo directly infringes the asserted claims through the making, use, offering for sale, and sale of the Accused Products. The Resideo-branded smart thermostat, which is designed to connect to Resideo's cloud backend servers, is made by Resideo. The system is also used, offered for sale, and sold by Resideo. The Accused Products infringe "out of the box" and are configured to satisfy each element of the asserted claims. Installation of the Accused Products in the recommended manner results in the infringing thermostat system. Even before the Accused Products/Instrumentalities are actually installed, they are configured to perform each element of the asserted claims. This results in direct infringement regardless of the fact that the thermostat system is not sold in a state that is already plugged in, powered on, connected, etc.

	<p>To the extent a customer act may be deemed required to form the claimed system, Resideo still directly infringes, and also infringes pursuant to theories of inducement or contributory infringement. As an example, customers are encouraged and intended to use the Resideo mobile app(s) and the Energy Care features of the Accused Products, and such use is consistent with normal use and configuration of the Accused Products. Resideo's customers connect the Accused Products to Resideo's cloud or back-end in the ordinary use of the Accused Products, pursuant to instructions from Resideo. As another example, Resideo's customers create an account and register devices/structures with the customer's account. The Accused Products are designed to be associated with the customer's home and to connect to the customer's HVAC system. As another example, Resideo's customers are encouraged to allow their electronic devices such as a smartphone to download the Resideo app to send signals to the thermostat system. Resideo specifically instructs and encourages users to allow features such as Energy Care to operate, so that the thermostat system is designed to save energy.</p> <p>Resideo induces, encourages, and provides instructions and incentives to customers to engage the features described in the charts below with respect to each charted claim, which perform the claim limitations as more fully set forth below. Further, Resideo possessed knowledge that the underlying induced acts constitute patent infringement, at least since this case commenced, and potentially earlier. Resideo specifically intended to encourage the underlying acts constituting direct infringement, e.g., which occur pursuant to use of the features described above and below. Resideo specifically intended these acts because it provided instructions to its customers explaining how to use these features, encouraged its customers to use these features, sign up for and enroll in these features.</p> <p>The Accused Products are not staple goods, not suitable for substantial noninfringing use, and do form a material part of the inventions described in the claims. They infringe each element of the claim when they are installed in the United States as Google intends and according to their design. Resideo's Energy Star certificates for the Accused Products also show that the Accused Products support accused features.</p> <p>The Resideo Energy Care website explains that Resideo works with utilities around the US to provide demand response and energy efficiency programs including Resideo Energy Care or Connected Savings. Utilities pay for the Energy Care service for the user, and other users are</p>
--	--

encouraged to purchase services like Energy Care for a subscription fee (e.g., \$9.99/year) from Resideo.

See, e.g., T Series Thermostat Family | Resideo Pro:
<https://www.resideo.com/us/en/pro/solutions/t-series/>



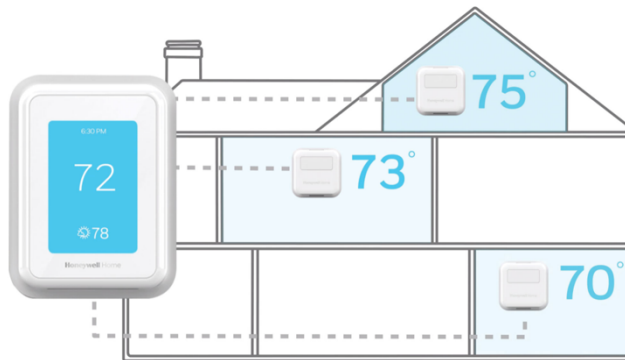


PRODUCT OVERVIEW

The T9 Smart Thermostat works with Smart Room Sensors to help you adjust the temperature from anywhere and stay cozy in the rooms that matter.

Place sensors where you want to see each room's temperature and humidity. Use the multi-room display on the thermostat's touchscreen — or in the Honeywell Home app — to focus on rooms based on occupancy or a specific schedule you choose. When focusing on multiple rooms, the T9 works toward creating an average temperature, balancing the needs across the whole home.

Whether it's a song belted in the shower or a whispered secret, your air goes beyond simply carrying oxygen to circulating memories. Heavy or light, hot or cold, always unique to your home, the air you feel is more than its temperature setting. Our Air products and services work with you and for you, supporting and creating more comfortable surroundings.



**“THE BEST RANGE I’VE
SEEN IN THIS CLASS OF
PRODUCT.”**

Focus on multiple rooms for comfort where it matters most. Don’t guess at the temperature in the bedroom from the hallway. Get the comfort you want, where you want it – to sleep, work, focus or unwind.

<https://www.resideo.com/us/en/products/air/thermostats/wifi-thermostats/t9-smart-thermostat-with-sensor-rcht9610wfs2003-u>

See also T10 Pro Smart Thermostat with RedLINK Room Sensor brochure:

https://digitalassets.resideo.com/damroot/Original/10004/03-00458.pdf?_ga=2.56182061.768294451.1641940625-374792558.1641940625

See also T10 Pro Smart Thermostat with RedLINK Getting Started guide:

https://digitalassets.resideo.com/damroot/Original/10014/33-00424EFS.pdf?_ga=2.123077901.768294451.1641940625-374792558.1641940625

See also T10 Pro Smart Thermostat with RedLINK User Guide:

https://digitalassets.resideo.com/damroot/Original/10003/33-00428.pdf?_ga=2.52964526.768294451.1641940625-374792558.1641940625

See also Honeywell Home T9 Smart Thermostat with Smart Room Sensors video:

https://www.youtube.com/watch?time_continue=6&v=LIdFkaxqSG0&feature=emb_title

Selecting system mode

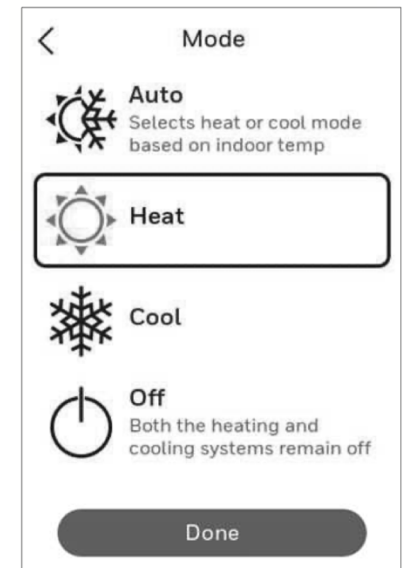
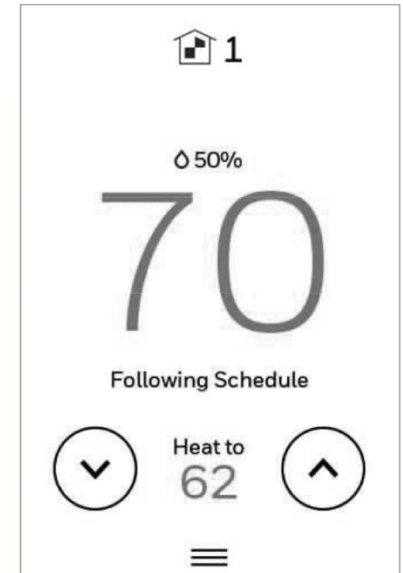
Touch homescreen to wake the thermostat.

Touch the menu icon and then touch “Select Mode.”

- **Heat:** Controls the heating system.
- **Cool:** Controls the cooling system.
- **Off:** Turns the heating and cooling systems off.
- **Auto:** When enabled, the thermostat will automatically use heating or cooling to reach the desired temperature. Operation on page 9.
- **Em Heat:** Controls auxiliary or emergency heat; only available on systems with a heat pump. Operation on page 9.

Notes:

- All available modes may not be shown for some applications. Scroll down to see more mode options (if available).
- Auto mode may not appear on the thermostat screen or in the app depending on your equipment, and how your thermostat is configured.
- When Auto is selected, “Heat to” and “Cool to” will both be shown from the “active” home screen.
- Em Heat is only available for heat pump systems. The thermostat must also be configured to control a heat pump and an auxiliary/emergency heat stage.
- When Auto is selected, “Heat to” and “Cool to” will both be shown from the “active” home screen.



Main Menu on Thermostat

From Home Screen, press the menu icon at bottom of the display (3 horizontal lines). If this is not shown at home screen, touch screen to wake display first.

Main Menu options

System mode (Available modes vary depending on how the thermostat was configured)

- Heat
- Off
- Cool
- Auto – Operation on page 9.
- Em Heat – Operation on page 9.

Fan (Fan setting not available for all system types)

- Auto (Fan only runs with a call for heat or cool)
- On (fan runs continuous)
- Circulate (fan runs randomly approx. 33% of the time)

Priority

If wireless indoor temperature/humidity/motion sensors are used, select which sensors are used for temperature control. You can choose active sensor (ones detecting motion) or manually select which sensors to use.

Schedule

- Create new schedule (Set a time-based schedule)
- Disable schedule
- Reset to default schedule

NOTE: To enable geofencing, use the Honeywell Home app.

Management:

Devices & Sensors

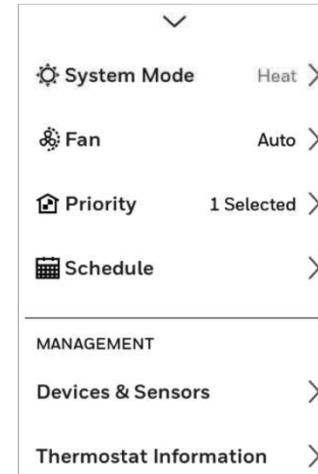
- View the temperature and humidity reading from Smart Room Sensors
- Identify a Smart Room Sensor
- Add a new Smart Room Sensor
- Remove a Smart Room Sensor

Thermostat information

- Mac Address
- IP Address
- Date Code
- Model Number
- Build Date
- Collection Version
- Wi-Fi Bootloader Version
- Wi-Fi Application Version

Equipment Status

- System mode
- Heat stages (on or off)
- Cool stages (on or off)
- Fan on or off



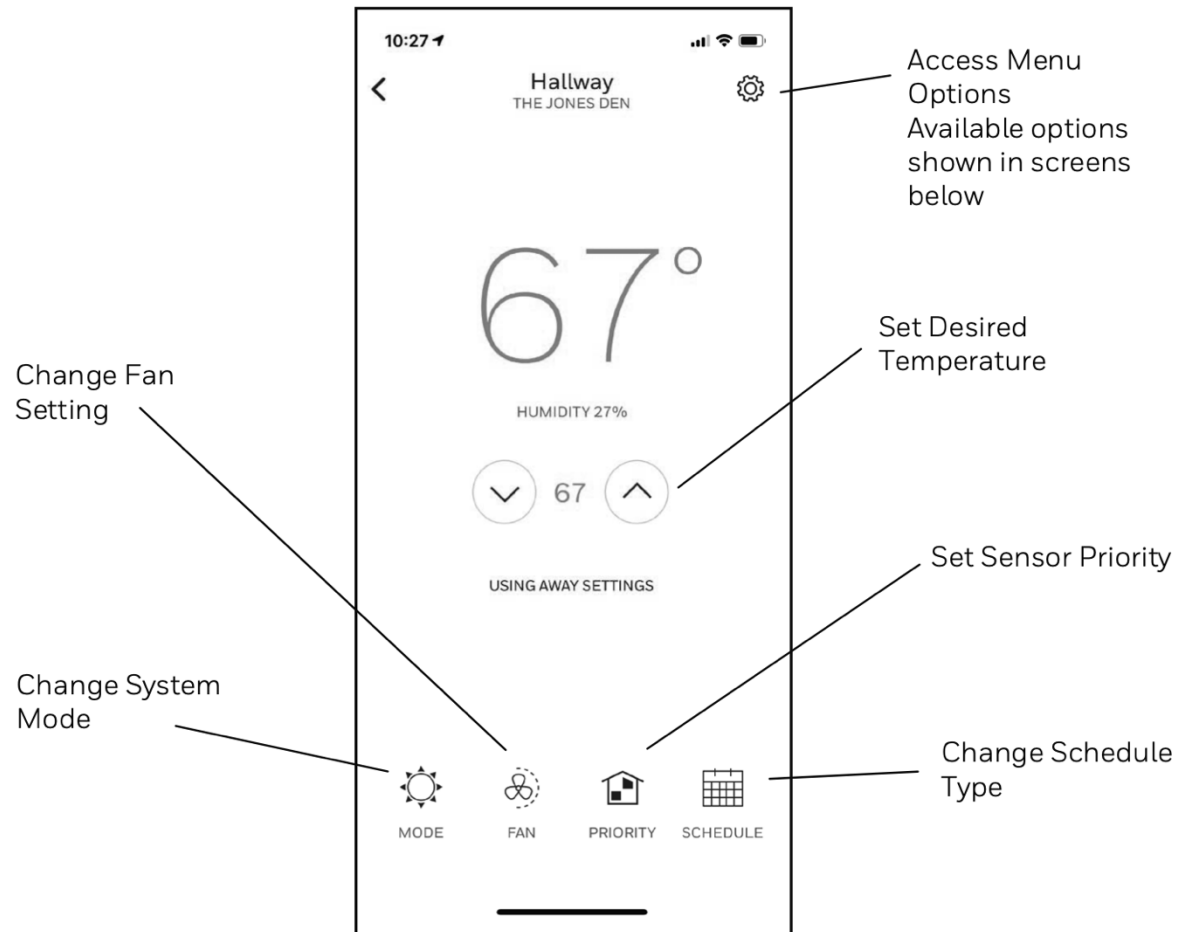
Configuration:

- Wi-Fi
- Connect App
- Security
- Preferences
- Advanced Setup

Scroll down to see more options

Using the Honeywell Home App

Home Screen



<https://digitalassets.resideo.com/damroot/Original/10015/33-00478.pdf>

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/t5-smart-thermostat-without-c-wire-adapter-rcht8610wf2006-u/> (T5 product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/t6-pro-smart-thermostat-multi-stage-3-heat-2-cool-th6320wf2003-u/> (T6 product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/t9-smart-thermostat-with-sensor-rcht9610wfs2003-u/> (T9 product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/t10-pro-smart-thermostat-with-redlinkr-room-sensor-thx321wfs2001w-u/> (T10 product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/wifi-color-touchscreen-thermostat-rth9585wf1004-u/> (WiFi Color Touchscreen Thermostat product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/wi-fi-programmable-smart-thermostat-rth9580wf1005-u1/> (WiFi Programmable Smart Thermostat product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/the-round-smart-thermostat-rch9310wf5003-u/> (The Round Smart Thermostat product webpage);

<https://www.honeywellhome.com/us/en/products/air/thermostats/wifi-thermostats/wifi-9000-color-touchscreen-thermostat-th9320wf5003-u/> (WiFi 9000 Color Touchscreen Thermostat product webpage);

https://www.energystar.gov/productfinder/product/certified-connected-thermostats/results?formId=7672588-400-404-04-32249611&scrollTo=1137&search_text=&ct_device_brand_name_isopen=0&brand_name_isopen=0&low_price=&high_price=&ct_device_communication_method_isopen=0&markets_filter=United+States&zip_code_filter=&product_types=Select+a+Product+Category&sort_by=low_price&sort_direction=asc¤tZipCode=90025&compare=2344268&compare=2344267&pa

	<p>ge_number=0&lastpage=0&ct_device_brand_name_filter=Honeywell&ct_device_brand_name_filter=Honeywell+Home (linking to Energy Star certification information for Resideo thermostat systems);</p> <p>See, e.g., T Series Comparison Chart, available at https://digitalassets.resideo.com/damroot/Original/10014/03-00306.pdf:</p>
--	--

T SERIES COMPARISON CHART

Thermostat	Thermostat name	Program options	Power method	Display size	Stages	Dual fuel	Ventilation with ERV/HRV or damper	Wired indoor/outdoor sensors	Service reminders
	T10 Pro Smart with RedLINK® Room Sensor THX321WFS2001W RedLINK® Room Sensor (2-pack) C71B9R2002-2	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T10 Pro Smart THX321WF2003W	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T6 Pro Smart TH632DWF2003	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes	Yes	Yes
	T6 Pro Smart TH622DWF2006	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	No	No	Yes	Yes
	T6 Pro Z-Wave® TH6320ZW2003	7-day, 5-2, 5-1-1, non-programmable or occupancy controlled	Battery or C-wire	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Yes
	T6 Pro Hydronic TH6100AF2004	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	1 Stage Hot Water Heat Only – No Fan	No	No	Yes	No
	T6 Pro TH6320U2008	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6220U2000	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6210U2001	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4210U2002	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4110U2005	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	1H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T3 Pro TH3210U2004	Non-programmable	Battery or C-wire	3.32 sq. in.	2H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T3 Pro TH3110U2008	Non-programmable	Battery or C-wire	3.32 sq. in.	1H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T1 Pro TH1110D2009	Non-programmable	Battery or C-wire	2.37 sq. in.	1H/1C Conventional or 1H/1C Heat Pump	No	No	No	No
	T1 Pro TH1010D2000	Non-programmable	Battery or C-wire	2.37 sq. in.	1 stage heat-only or cool-only	No	No	No	No

	<p>See, e.g., T6 Pro, T10 Pro brochures and data sheets.</p>
--	--

	<p>As another example, see, e.g., Energy Care home page snapshots, https://www.resideo.com/us/en/energy-care/:</p>
--	---

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

ENERGY CARE

TURBO BOOST YOUR SMART THERMOSTAT.

Your smart thermostat already keeps your home's temperature just how you like it. But what if there was a way for it to adapt to your surroundings even further, based on your daily routine? Now there is, with Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year.

[BUY NOW](#)

[FEEDBACK](#)

[FEATURES](#) | [HOW IT WORKS](#) | [BENEFITS](#) | [BUY](#) | [FAQ](#)

HANDLE YOUR HOME WITH CARE

Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers.

Resideo Energy Care

Copy link

70

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

[AGREE](#)

--	--

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area is divided into three sections:

- MONITORING THE WEATHER:** Accompanied by an illustration of a sun behind a cloud with rain. Text: "Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn."
- READING THE ROOM:** Accompanied by an illustration of a house with a pie chart and a line graph. Text: "Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature."
- GETTING TO KNOW YOUR HOME:** Accompanied by an illustration of a person's head with a pie chart and a line graph. Text: "Energy Care learns with your thermostat."

A vertical "FEEDBACK" button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." An "AGREE" button is provided.

--	--

The screenshot shows a web browser displaying the Resideo Energy Care website. The URL in the address bar is <https://www.resideo.com/us/en/energy-care/>. The page features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below the navigation bar is a secondary menu with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and a shopping cart icon are also present, along with a 'FIND A PRO' button.

The main content area is titled 'GETTING TO KNOW YOUR HOME'. It features an illustration of a woman with blonde hair, wearing a blue shirt, with a pie chart and a line graph next to her. The text reads: 'Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door. Now that's a warm welcome.'

Below this section is another heading, 'POWERFUL FEATURES THAT WORK IN HARMONY'. The text reads: 'On their own, each of these factors don't have much of an impact. But when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.'

To the right of this text is an illustration of a smart thermostat with a green plus sign above it, connected to several lines representing different features or data points.

At the bottom of the page, there is a section titled 'HOW DOES IT WORK?'. Below this section is a cookie consent banner that reads: 'Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.' There is an 'AGREE' button next to the banner.

--	--

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilating, and air conditioning (HVAC) systems. Energy Care prevents this, instead keeping temperature transitions smooth.

It does this by:

1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures.
2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort.
3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times.

The graph below illustrates HVAC energy savings in a cooling setting.

With Energy Care Without Energy Care

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

FEEDBACK

--	--

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar features the Resideo logo and links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a FIND A PRO button. A secondary navigation bar includes links for FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The central graphic is a line chart titled "HVAC Energy Consumption" comparing energy usage "With Energy Care" and "Without Energy Care" across different times of the day. The chart shows that with Energy Care, energy consumption is significantly lower during the "Out for the day" period, resulting in "Energy waste" being minimized. The chart is divided into five sections: Sleeping (nighttime), Leave home, Out for the day, Arrive home, and Evening (daytime). A vertical "FEEDBACK" button is located on the right side of the chart.

Below the chart, the text reads: **MANAGE ENERGY, JUST BY BEING YOU**. Underneath this, it states: "Subscribing to Energy Care gives you:".

At the bottom of the page, there is a section for "RESIDEO CLOUD TECHNOLOGY" featuring an illustration of a person's head and shoulders next to a computer monitor displaying a data dashboard. A cookie consent banner at the very bottom states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an "AGREE" button.

--	--

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below this is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a search icon. A horizontal menu below the navigation bar includes links for FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area is divided into three sections:

- RESIDEO CLOUD TECHNOLOGY:** This section features an illustration of a person with curly hair looking at a tablet displaying a line graph and a house icon. The text states: "Our cloud technology allows you to stay in control. You can easily suspend your Energy Care service by using the app or onscreen 'hold' button."
- PERSONALIZED SAVINGS:** This section includes an illustration of a piggy bank with two coins falling into it. The text reads: "The data collected from the way you use your smart thermostat works with our algorithms to help you save on your HVAC energy bills."
- A PLANET-FRIENDLY HOME:** This section features an illustration of a house on a globe. The text says: "If you want to save energy, owning a smart thermostat is the first step. But you can..."

A vertical "FEEDBACK" button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." An "AGREE" button is provided for user consent.

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. A secondary navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. Below the navigation, a horizontal menu contains FEATURES, HOW IT WORKS, BENEFITS (highlighted), BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of expandable questions and answers.

COMMON QUESTIONS

- What energy savings are typical with Energy Care?** (+)
- What are the other benefits with Energy Care?** (-)

Since Resideo Energy Care is so focused on comfort after periods of energy savings, customers are often more comfortable with the service enabled than with their previous standard programed setpoints. For example, on very cold afternoons Resideo Energy Care is going to turn the heat back up sooner than what when the programmed schedule would kick in. Also since the majority of Resideo Energy Care's energy savings are coming from reducing the amount of time the heating and cooling system runs each day, it can often extend the lifetime of those systems.
- How Does Energy Care Work?** (+)
- Sounds cool, but can't I just do this myself?** (+)
- Does weather really make that much of an impact on my heating and cooling costs?** (+)
- How is Energy Care different from other energy tools and programs?** (+)
- How is Energy Care different from the programs my utility provides?** (+)
- Can I turn Energy Care off in the home?** (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits?** (+)

A vertical 'FEEDBACK' button is located on the right side of the page.

The screenshot displays the Resideo Energy Care website. The header includes navigation links for HOMEOWNERS and PROFESSIONALS, along with a Honeywell Home logo and a FIRST ALERT button. The main navigation bar features the Resideo logo and links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a 'FIND A PRO' button are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The 'COMMON QUESTIONS' section is prominently displayed, featuring a list of FAQs. The 'How Does Energy Care Work?' question is expanded, revealing a detailed explanation of the service. The explanation states that Resideo Energy Care uses data from connected thermostats and hyperlocal weather data to develop a custom energy model, which then sends optimized thermostat schedules to participating thermostats based on forecasted weather, thermal properties, and customer comfort settings. A 'FEEDBACK' button is visible on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (-)**

Resideo Energy Care uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer's selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, a Honeywell Home logo, a FIRST ALERT button, and an About Us link. Below the header is a main navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, along with a search icon and a FIND A PRO button. A secondary navigation bar lists FEATURES, HOW IT WORKS, BENEFITS (which is highlighted), BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable/collapsible icons. The fourth question, 'Sounds cool, but can't I just do this myself?', is currently expanded, revealing a detailed answer. To the right of the questions is a vertical FEEDBACK button.

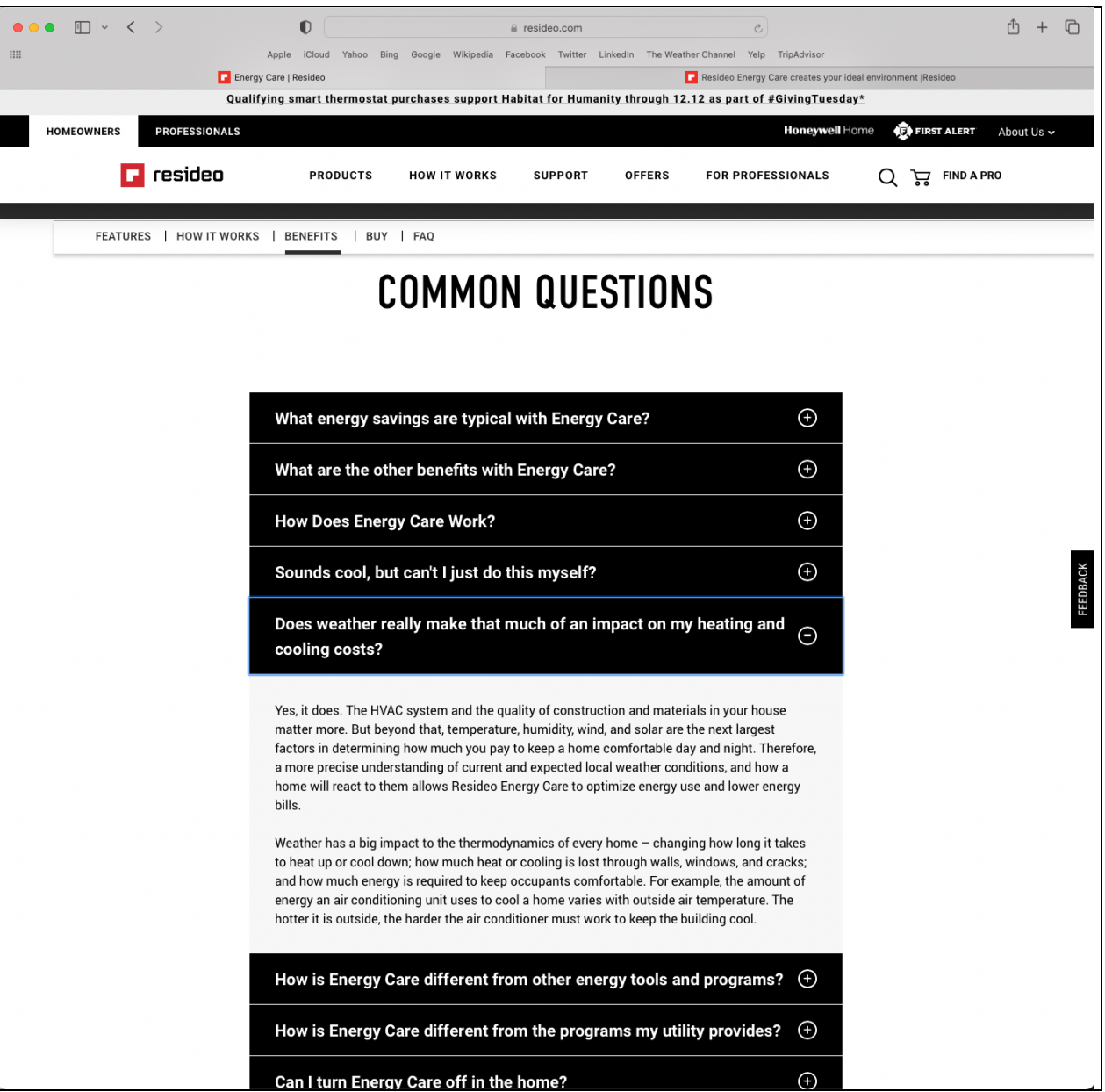
COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (-)**

Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)

The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver (+)

FEEDBACK



The screenshot shows the Resideo Energy Care website. The header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS (highlighted), BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expand/collapse icons. The fifth question, 'Does weather really make that much of an impact on my heating and cooling costs?', is selected and expanded, showing a detailed answer. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (-)**

Yes, it does. The HVAC system and the quality of construction and materials in your house matter more. But beyond that, temperature, humidity, wind, and solar are the next largest factors in determining how much you pay to keep a home comfortable day and night. Therefore, a more precise understanding of current and expected local weather conditions, and how a home will react to them allows Resideo Energy Care to optimize energy use and lower energy bills.

Weather has a big impact to the thermodynamics of every home – changing how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable. For example, the amount of energy an air conditioning unit uses to cool a home varies with outside air temperature. The hotter it is outside, the harder the air conditioner must work to keep the building cool.

- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)

The screenshot shows the Resideo Energy Care website. The browser address bar displays "resideo.com". The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below the header is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a "FIND A PRO" button are also present. The main content area is titled "COMMON QUESTIONS" and features a list of questions with expandable answers. The question "How is Energy Care different from other energy tools and programs?" is currently expanded, showing a detailed response. A vertical "FEEDBACK" button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (-)**

The two main differences are that Resideo Energy Care makes customer comfort its number one priority and that it's powered by the world's largest real-time weather network. We believe that keeping people comfortable is the key to keeping the service running and, ultimately, the total amount of energy saved. In the end, it is the hyperlocal weather conditions and forecasts that allow Resideo Energy Care to minimize energy use and maximize savings without sacrificing comfort.
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK


The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a 'FIRST ALERT' badge. Below the header is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. The main content area features a 'COMMON QUESTIONS' section with a list of expandable FAQ items. The first six items are expanded, showing their respective answers. The seventh item, 'Can I turn Energy Care off in the home?', is collapsed. A 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (-)
- Can I turn Energy Care off in the home? (+)

We work with utilities around the US to provide you with two types of programs.

- Demand Response: These programs bring you rewards and rebates, often through bill credits, for allowing your utility to make small adjustments during peak times of demand each year, helping to reduce stress on the energy grid in your area.
- Energy Efficiency: This is where Resideo Energy Care fits in. Some utilities will pay for this service for you, so they can reduce costs to acquire new energy. If your utility doesn't offer this, you can purchase Energy Care for \$9.99/year from Resideo.
- Check for [local programs here](#).

<p>1[a] at least one HVAC control system associated with a first structure that receives temperature measurements from at least a first structure conditioned by at least one HVAC system, and receives status of said HVAC system;</p>	<p>The Accused Products/Instrumentalities at least one HVAC control system associated with a first structure that receives temperature measurements from at least a first structure conditioned by at least one HVAC system, and receives status of said HVAC system. See 1[pre] and additional evidence/explanation cited therein.</p> <p>For example, the “at least one HVAC control system” can correspond to the Resideo thermostat (which sends control signals over relays to turn on or off the HVAC), alone or in combination with the Resideo cloud servers that additionally control the HVAC system by sending control signals to the HVAC system via the connected thermostat. The Resideo cloud servers that send control signals to the thermostat (e.g., control settings from the Energy Care feature) also correspond to “at least one HVAC control system,” alone or in combination with the thermostat.</p> <p>See, e.g., https://www.resideo.com/us/en/pro/solutions/t-series/</p> <div data-bbox="772 831 1990 1003">  <div> <div>Temperature Control</div> <div>Temperature Awareness (Temperature in multiple rooms)</div> <div>Temperature Prioritization (Based on motion)</div> <div>RedLINK Functionality</div> <div>Access from Anywhere (Connection with Resideo App)</div> <div>Temperature Alerts (When rooms are too cold)</div> </div> </div> <p>See, e.g., https://www.resideo.com/us/en/pro/products/air/thermostats/wifi-thermostats/t10-pro-smart-thermostat-with-redlinkr-room-sensor-thx321wfs2001w-u/ (Product Features includes “Internet weather” and “indoor temperature, humidity and motion sensors” and “heat and cool” with support for multiple heat/cool stages”) (“location-based temperature control”).</p> <p>The Resideo- or Honeywell Home-branded thermostat receives temperature measurements from the structure where it is installed (using the “indoor temperature” sensor that each thermostat includes, <i>see id.</i> for exemplary description for a T10 model), which is a home that is conditioned by an HVAC system where the thermostat is installed. The thermostat receives the temperature</p>
---	---

measurements using, e.g., a “temperature sensor” (*see id.*), alone or in combination with a compensation algorithm or other error correction algorithm to improve the accuracy of the sensor reading to report a more accurate inside ambient temperature measurement, in degrees of either Fahrenheit or Celsius. Even if the inside temperature measurement process involves some processing, compensation, averaging, or error correction in addition to a raw sensor reading, that is still literally receiving temperature measurements from at least a first location as required by the claim language. It would also be infringing under the doctrine of equivalents, by performing substantially the same function (HVAC control system that receives temperature measurements from at least a first location) in substantially the same way (a thermostat in the home is installed that obtains inside temperatures in degrees and reports the inside temperatures as the measure of the indoor ambient air temperature, using one or more thermistors or temperature sensors or other temperature measuring tool(s), and/or processing, normalizing, compensating, or error correcting such that a more accurate inside temperature is reported using the measuring tool(s)) to achieve substantially the same result (a system for controlling the HVAC system in the user’s home receives values for the indoor ambient temperature in degrees).

As another example, Resideo Energy Care cloud system receives inside temperature measurements from a first location conditioned by an HVAC system, which corresponds to receiving the inside temperature data uploaded from the location of the user’s home where the thermostat is installed, and which is the source of the home inside temperature data used for Energy Care. This is another example of at least one HVAC control system “receiving temperature measurements” as recited in the claim.

Each of the thermostat and the Resideo Energy Care cloud system also receive the status of the HVAC system, e.g., whether and when the HVAC system is heating or cooling the structure, HVAC runtime, HVAC stage of heating or cooling, etc. For example, the thermostat processor obtains data indicative of the status of the HVAC system being “on” including the current stage of heating or cooling and when that stage begins and ends and/or the runtime of each respective stage of heating or cooling, as well as data indicating when the HVAC system status is “off” and there is no active heating or cooling, and this data received by the thermostat processor is also uploaded to and received with the Resideo cloud processors. The HVAC status information is analyzed, *inter alia*, e.g., for the Energy Care feature. See, e.g., www.resideo.com/us/en/energy-care/.

For example, the Accused Products/Instrumentalities includes one or more HVAC control systems corresponding to the thermostat alone, Resideo Cloud Technology server(s) used for Energy Care alone, or the combination of the thermostat and the cloud servers. The control system can correspond to the thermostat alone or in combination with the Resideo cloud server technology, or only the Resideo cloud server technology. Each of these receives inside temperature data from the home over time. The thermostat receives the inside temperature data from the home, and the Resideo Cloud servers receive the inside temperature data from the connected thermostat and uses it for the Energy Care Home Thermodynamic technology and the energy model trained and used for Energy Care, which sends optimized thermostat schedules to participating thermostats which controls the HVAC system, based on receiving inside temperature data and HVAC status data from the connected thermostat. See, e.g., www.resideo.com/us/en/energy-care/ (Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.”); (“Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”); (Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them,” not only to “optimize thermostat settings each day” but also “recalculates settings on-the-fly”); (Energy Care calculates “how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable” based on and in response to the weather.)

	As another example, see, e.g., Energy Care home page snapshots, https://www.resideo.com/us/en/energy-care/ :
--	--

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

ENERGY CARE

TURBO BOOST YOUR SMART THERMOSTAT.

Your smart thermostat already keeps your home's temperature just how you like it. But what if there was a way for it to adapt to your surroundings even further, based on your daily routine? Now there is, with Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year.

BUY NOW

FEEDBACK

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HANDLE YOUR HOME WITH CARE

Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers.

Resideo Energy Care

Copy link

70

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, with a search icon and a FIND A PRO button. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area features three sections:

- MONITORING THE WEATHER:** Accompanied by an illustration of a sun behind a cloud with rain. Text: "Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn."
- READING THE ROOM:** Accompanied by an illustration of a house with a pie chart and a line graph. Text: "Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature."
- GETTING TO KNOW YOUR HOME:** Accompanied by an illustration of a person's head with a pie chart and a line graph. Text: "Energy Care works with your thermostat to..."

A vertical FEEDBACK button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an AGREE button.

https://www.resideo.com/us/en/energy-care/

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

GETTING TO KNOW YOUR HOME

Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door. Now that's a warm welcome.

POWERFUL FEATURES THAT WORK IN HARMONY

On their own, each of these factors don't have much of an impact. But when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.

HOW DOES IT WORK?

Discrepancies in temperature can put stress on heating, ventilation, and air conditioning

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home. A banner at the top states: "Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*". The main navigation bar includes links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and "FIND A PRO" link are also present.

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilating, and air conditioning (HVAC) systems. Energy Care prevents this, instead keeping temperature transitions smooth. It does this by:

1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures.
2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort.
3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times.

The graph below illustrates HVAC energy savings in a cooling setting.

The graph shows two horizontal bars representing energy usage. The bar on the left, labeled 'With Energy Care', is dark blue and shorter. The bar on the right, labeled 'Without Energy Care', is light blue and longer. The background of the graph is split into a dark blue night scene with a white crescent moon on the left and a light blue day scene with a yellow sun on the right.

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The page features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below this is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a search icon. A third navigation bar includes links for FEATURES, HOW IT WORKS (highlighted), BENEFITS, BUY, and FAQ.

The main content area features a large graphic illustrating HVAC energy consumption. On the left, a dark blue vertical bar represents 'Sleeping' with a crescent moon icon. To its right, a light gray area represents 'Out for the day' with a sun icon. A green line graph shows energy consumption levels. The 'With Energy Care' line (solid green) shows a significant dip during the 'Out for the day' period, labeled 'Energy waste'. The 'Without Energy Care' line (dashed green) remains at a higher, constant level during this period. The graph is divided into five vertical sections: Sleeping, Leave home, Out for the day, Arrive home, and Evening. A vertical 'FEEDBACK' button is located on the right side of the graph.

Below the graphic, the text reads: **MANAGE ENERGY, JUST BY BEING YOU**. Underneath this, it states: 'Subscribing to Energy Care gives you:'.

At the bottom of the page, there is a section for 'RESIDEO CLOUD TECHNOLOGY' featuring an illustration of a smartphone displaying a graph. Below this is a dark gray footer containing a cookie consent message: 'Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.' To the right of this message is an 'AGREE' button.

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, with a search icon and a FIND A PRO button. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area features three sections:

- RESIDEO CLOUD TECHNOLOGY**: Accompanied by an illustration of a person with curly hair looking at a tablet displaying a house and a line graph. The text states: "Our cloud technology allows you to stay in control. You can easily suspend your Energy Care service by using the app or onscreen 'hold' button".
- PERSONALIZED SAVINGS**: Accompanied by an illustration of a pink piggy bank with two gold coins. The text states: "The data collected from the way you use your smart thermostat works with our algorithms to help you save on your HVAC energy bills."
- A PLANET-FRIENDLY HOME**: Accompanied by an illustration of a house on a green hill with a blue sky. The text states: "If you want to save energy, owning a smart thermostat is the first step. But you can".

A vertical FEEDBACK button is located on the right side of the page. At the bottom, a dark gray footer contains a cookie consent message: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." and an AGREE button.

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a FIRST ALERT button. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of expandable FAQ items. The first two items are expanded, showing their respective answers. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

What energy savings are typical with Energy Care? (+)

What are the other benefits with Energy Care? (-)

Since Resideo Energy Care is so focused on comfort after periods of energy savings, customers are often more comfortable with the service enabled than with their previous standard programed setpoints. For example, on very cold afternoons Resideo Energy Care is going to turn the heat back up sooner than what when the programmed schedule would kick in. Also since the majority of Resideo Energy Care's energy savings are coming from reducing the amount of time the heating and cooling system runs each day, it can often extend the lifetime of those systems.

How Does Energy Care Work? (+)

Sounds cool, but can't I just do this myself? (+)

Does weather really make that much of an impact on my heating and cooling costs? (+)

How is Energy Care different from other energy tools and programs? (+)

How is Energy Care different from the programs my utility provides? (+)

Can I turn Energy Care off in the home? (+)

How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK

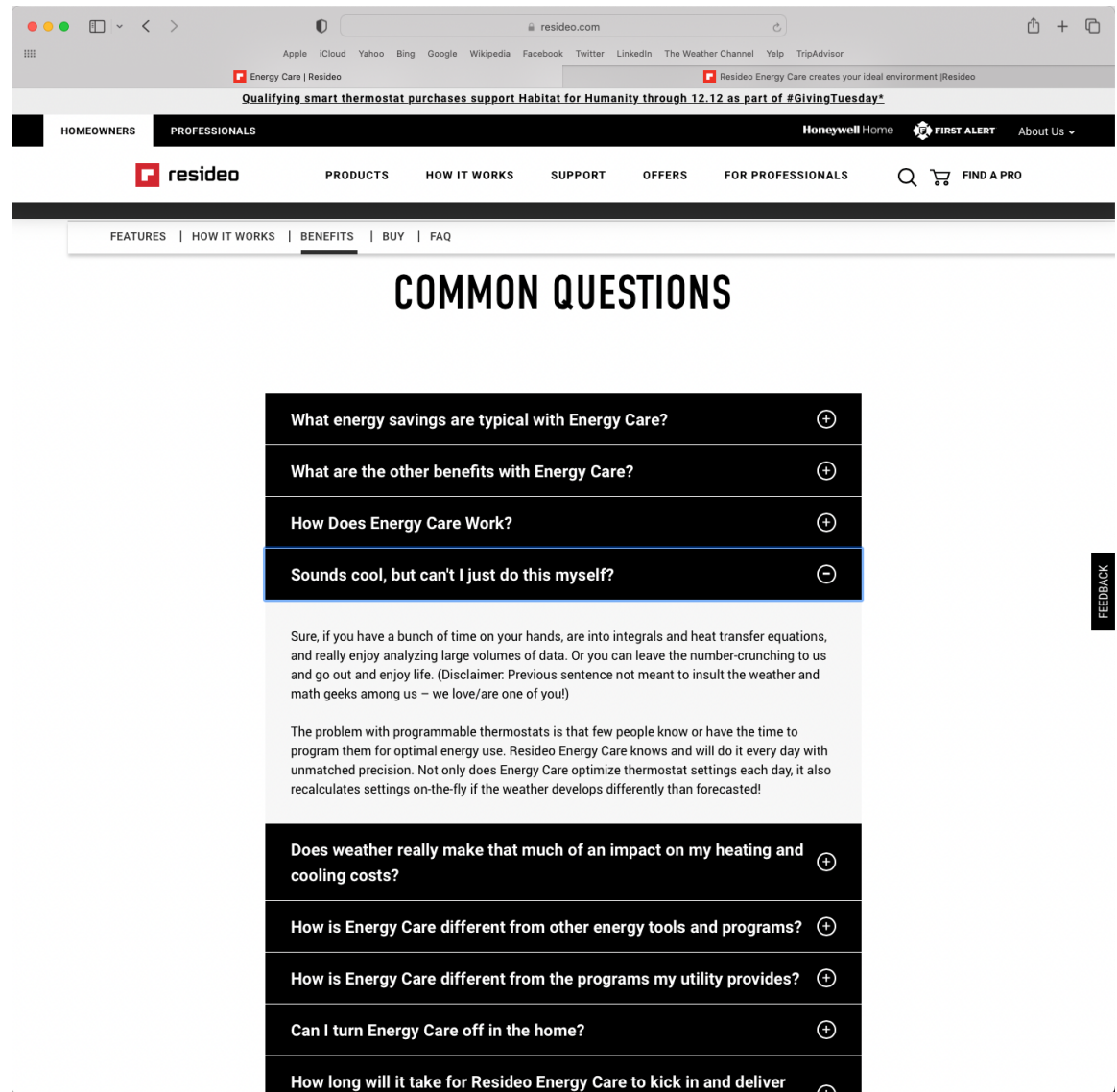
The screenshot shows a web browser displaying the Resideo Energy Care website. The browser's address bar shows 'resideo.com'. The website's header includes navigation links for 'HOMEOWNERS' and 'PROFESSIONALS', and a 'Honeywell Home' logo. Below the header is a navigation bar with links for 'PRODUCTS', 'HOW IT WORKS', 'SUPPORT', 'OFFERS', 'FOR PROFESSIONALS', and a search icon. A secondary navigation bar contains links for 'FEATURES', 'HOW IT WORKS', 'BENEFITS', 'BUY', and 'FAQ'. The main content area is titled 'COMMON QUESTIONS' and features an accordion menu with the following questions:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?** (Expanded)
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?
- How long will it take for Resideo Energy Care to kick in and deliver some benefits?

The expanded 'How Does Energy Care Work?' section contains the following text:

Resideo Energy Care uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer's selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.

A vertical 'FEEDBACK' button is located on the right side of the page.



The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home. A banner at the top states: 'Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*'. Below the header, a navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a 'FIND A PRO' button are also present.

The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable answers. The questions are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?
- How long will it take for Resideo Energy Care to kick in and deliver

The answer to the question 'Sounds cool, but can't I just do this myself?' is expanded and reads:

Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)

The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!

A vertical 'FEEDBACK' button is located on the right side of the page.

The screenshot shows the Resideo website in a browser window. The browser's address bar displays 'resideo.com'. The website's navigation bar includes links for 'HOMEOWNERS', 'PROFESSIONALS', 'Honeywell Home', 'FIRST ALERT', and 'About Us'. Below the navigation bar, the 'resideo' logo is followed by links for 'PRODUCTS', 'HOW IT WORKS', 'SUPPORT', 'OFFERS', and 'FOR PROFESSIONALS'. A search bar with a magnifying glass icon and a shopping cart icon is also present, with the text 'FIND A PRO' next to it.

The main content area is titled 'COMMON QUESTIONS' in large, bold, black letters. Below this title, there is a list of questions, each with a plus icon to its right. The question 'Does weather really make that much of an impact on my heating and cooling costs?' is selected, and its answer is displayed below it. The answer text reads: 'Yes, it does. The HVAC system and the quality of construction and materials in your house matter more. But beyond that, temperature, humidity, wind, and solar are the next largest factors in determining how much you pay to keep a home comfortable day and night. Therefore, a more precise understanding of current and expected local weather conditions, and how a home will react to them allows Resideo Energy Care to optimize energy use and lower energy bills. Weather has a big impact to the thermodynamics of every home – changing how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable. For example, the amount of energy an air conditioning unit uses to cool a home varies with outside air temperature. The hotter it is outside, the harder the air conditioner must work to keep the building cool.'

Below the answer, there are three more questions, each with a plus icon to its right: 'How is Energy Care different from other energy tools and programs?', 'How is Energy Care different from the programs my utility provides?', and 'Can I turn Energy Care off in the home?'. A vertical 'FEEDBACK' button is located on the right side of the page.

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a 'FIRST ALERT' button. Below the header is a navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' button are also present. The main content area features a 'COMMON QUESTIONS' section with a list of questions and answers. The question 'How is Energy Care different from other energy tools and programs?' is selected, showing its answer. A 'FEEDBACK' button is visible on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (-)**
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

The two main differences are that Resideo Energy Care makes customer comfort its number one priority and that it's powered by the world's largest real-time weather network. We believe that keeping people comfortable is the key to keeping the service running and, ultimately, the total amount of energy saved. In the end, it is the hyperlocal weather conditions and forecasts that allow Resideo Energy Care to minimize energy use and maximize savings without sacrificing comfort.

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below the header is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' are also present. The main content area features a 'COMMON QUESTIONS' section with a list of questions and answers. The questions are: 'What energy savings are typical with Energy Care?', 'What are the other benefits with Energy Care?', 'How Does Energy Care Work?', 'Sounds cool, but can't I just do this myself?', 'Does weather really make that much of an impact on my heating and cooling costs?', 'How is Energy Care different from other energy tools and programs?', and 'How is Energy Care different from the programs my utility provides?'. The answers are provided in a light gray box. A 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (-)

We work with utilities around the US to provide you with two types of programs.

- Demand Response: These programs bring you rewards and rebates, often through bill credits, for allowing your utility to make small adjustments during peak times of demand each year, helping to reduce stress on the energy grid in your area.
- Energy Efficiency: This is where Resideo Energy Care fits in. Some utilities will pay for this service for you, so they can reduce costs to acquire new energy. If your utility doesn't offer this, you can purchase Energy Care for \$9.99/year from Resideo.
- Check for [local programs here](#).

Can I turn Energy Care off in the home? (+)

See, e.g., T Series Thermostat Family | Resideo Pro:
<https://www.resideo.com/us/en/pro/solutions/t-series/>



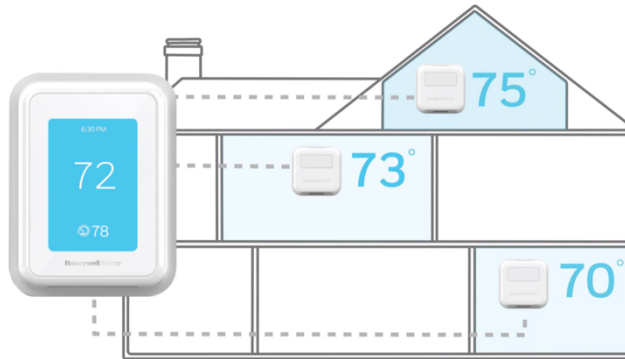


PRODUCT OVERVIEW

The T9 Smart Thermostat works with Smart Room Sensors to help you adjust the temperature from anywhere and stay cozy in the rooms that matter.

Place sensors where you want to see each room's temperature and humidity. Use the multi-room display on the thermostat's touchscreen — or in the Honeywell Home app — to focus on rooms based on occupancy or a specific schedule you choose. When focusing on multiple rooms, the T9 works toward creating an average temperature, balancing the needs across the whole home.

Whether it's a song belted in the shower or a whispered secret, your air goes beyond simply carrying oxygen to circulating memories. Heavy or light, hot or cold, always unique to your home, the air you feel is more than its temperature setting. Our Air products and services work with you and for you, supporting and creating more comfortable surroundings.



**“THE BEST RANGE I’VE
SEEN IN THIS CLASS OF
PRODUCT.”**

Focus on multiple rooms for comfort where it matters most. Don't guess at the temperature in the bedroom from the hallway. Get the comfort you want, where you want it – to sleep, work, focus or unwind.

<https://www.resideo.com/us/en/products/air/thermostats/wifi-thermostats/t9-smart-thermostat-with-sensor-rcht9610wfs2003-u>

See also T10 Pro Smart Thermostat with RedLINK Room Sensor brochure:

https://digitalassets.resideo.com/damroot/Original/10004/03-00458.pdf?_ga=2.56182061.768294451.1641940625-374792558.1641940625

See also T10 Pro Smart Thermostat with RedLINK Getting Started guide:

https://digitalassets.resideo.com/damroot/Original/10014/33-00424EFS.pdf?_ga=2.123077901.768294451.1641940625-374792558.1641940625

See also T10 Pro Smart Thermostat with RedLINK User Guide:

https://digitalassets.resideo.com/damroot/Original/10003/33-00428.pdf?_ga=2.52964526.768294451.1641940625-374792558.1641940625

See also Honeywell Home T9 Smart Thermostat with Smart Room Sensors video:

https://www.youtube.com/watch?time_continue=6&v=LIdFkaxqSG0&feature=emb_title

Selecting system mode

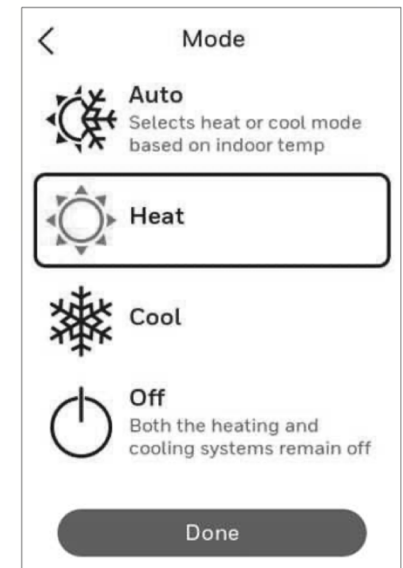
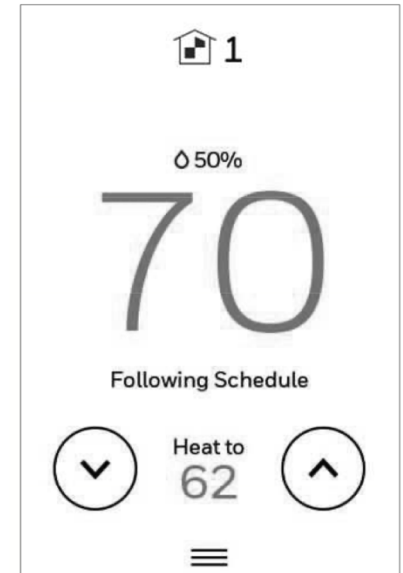
Touch homescreen to wake the thermostat.

Touch the menu icon and then touch “Select Mode.”

- **Heat:** Controls the heating system.
- **Cool:** Controls the cooling system.
- **Off:** Turns the heating and cooling systems off.
- **Auto:** When enabled, the thermostat will automatically use heating or cooling to reach the desired temperature. Operation on page 9.
- **Em Heat:** Controls auxiliary or emergency heat; only available on systems with a heat pump. Operation on page 9.

Notes:

- All available modes may not be shown for some applications. Scroll down to see more mode options (if available).
- Auto mode may not appear on the thermostat screen or in the app depending on your equipment, and how your thermostat is configured.
- When Auto is selected, “Heat to” and “Cool to” will both be shown from the “active” home screen.
- Em Heat is only available for heat pump systems. The thermostat must also be configured to control a heat pump and an auxiliary/emergency heat stage.
- When Auto is selected, “Heat to” and “Cool to” will both be shown from the “active” home screen.



Main Menu on Thermostat

From Home Screen, press the menu icon at bottom of the display (3 horizontal lines). If this is not shown at home screen, touch screen to wake display first.

Main Menu options

System mode (Available modes vary depending on how the thermostat was configured)

- Heat
- Off
- Cool
- Auto – Operation on page 9.
- Em Heat – Operation on page 9.

Fan (Fan setting not available for all system types)

- Auto (Fan only runs with a call for heat or cool)
- On (fan runs continuous)
- Circulate (fan runs randomly approx. 33% of the time)

Priority

If wireless indoor temperature/humidity/motion sensors are used, select which sensors are used for temperature control. You can choose active sensor (ones detecting motion) or manually select which sensors to use.

Schedule

- Create new schedule (Set a time-based schedule)
- Disable schedule
- Reset to default schedule

NOTE: To enable geofencing, use the Honeywell Home app.

Management:

Devices & Sensors

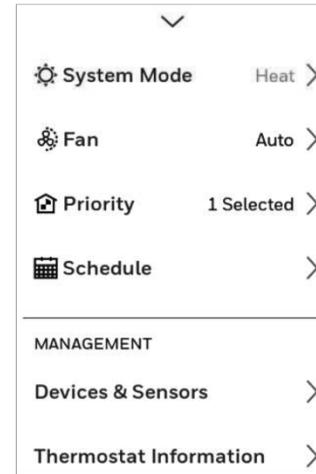
- View the temperature and humidity reading from Smart Room Sensors
- Identify a Smart Room Sensor
- Add a new Smart Room Sensor
- Remove a Smart Room Sensor

Thermostat information

- Mac Address
- IP Address
- Date Code
- Model Number
- Build Date
- Collection Version
- Wi-Fi Bootloader Version
- Wi-Fi Application Version

Equipment Status

- System mode
- Heat stages (on or off)
- Cool stages (on or off)
- Fan on or off



Configuration:

- Wi-Fi
- Connect App
- Security
- Preferences
- Advanced Setup

Scroll down to see more options

Using the Honeywell Home App

Home Screen

Change Fan
Setting

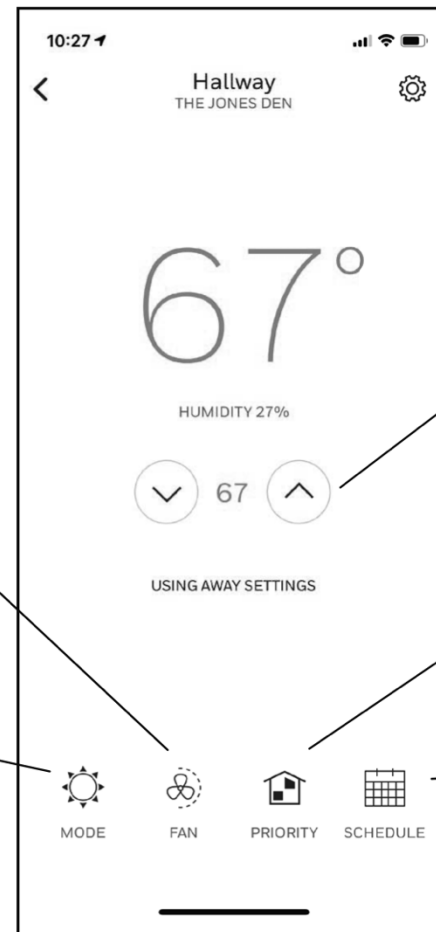
Change System
Mode

Access Menu
Options
Available options
shown in screens
below

Set Desired
Temperature

Set Sensor Priority

Change Schedule
Type



<p>1[b] one or more processors that receive measurements of outside temperatures from at least one source other than said HVAC system and compare said temperature measurements from said first structure over time;</p>	<p>The Accused Products/Instrumentalities includes one or more processors that receive measurements of outside temperatures from at least one source other than said HVAC system and compare said temperature measurements from said first structure over time. See 1[pre] and additional evidence/explanation cited therein.</p> <p>In the U.S. District Court for the Western District of Texas, Case No. 6:22-cv-00033-ADA, the parties agreed to a construction of “compare” as “analyze to determine one or more similarities or differences between.”</p> <p>The Accused Products/Instrumentalities includes one or more processors. For example, the Accused Products/Instrumentalities include processors that are used for the Resideo Cloud Technology that enables, e.g., Energy Care, energy efficiency, community savings, etc. energy features. The thermostats also include processors which may be additionally included in the mapping for “one or more processors,” but there is infringement where “one or more processors” corresponds to the Resideo Cloud Technology processors alone, or in combination with the thermostat processor(s).</p> <p>The Accused Products/Instrumentalities include one or more processors that receive outside temperature measurements from at least one source other than said HVAC system. The Accused Products use the outside temperature measurements for, e.g., the Energy Care feature. The weather data that includes outside temperature measurements comes from a weather service which is a source other than the HVAC system. See, e.g., https://www.resideo.com/us/en/energy-care/ (“Monitoring the weather: Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we’re saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It’s always prepared even when the weather takes a sudden turn.”). Energy Care processors receive both current data and forecasted data. <i>Id.</i> See also, e.g., https://www.resideo.com/us/en/pro/products/air/thermostats/wifi-thermostats/tl0-pro-smart-thermostat-with-redlinkr-room-sensor-thx321wfs2001w-u/ (Product Features includes “Internet weather” and “indoor temperature, humidity and motion sensors” and “heat and cool” with support for multiple heat/cool stages”) (“location-based temperature control”).</p>
--	---

Moreover, even if literal infringement were not found, the Resideo accused products would nonetheless also meet this claim element (“receive measurements of outside temperature from at least one source other than said HVAC system”) under the Doctrine of Equivalents by performing substantially the same function in substantially the same way to achieve the same result. The accused features and functions are insubstantially different from the claimed features and functions. For example, each Resideo accused product performs substantially the same function of receiving outside temperature measurements (e.g., by receiving outside weather data from a third-party provider and storing them in one or more databases). Each Resideo accused product also does so in substantially the same way (e.g., obtaining sufficiently current and geographically accurate outside temperature values corresponding to the relevant time and location of the customer’s home and using such values as outside temperature measurements). Even if there is processing done to either generate or correct the measurements, whether the processing is done by the weather service or Resideo, that is still substantially the same way as receiving outside temperature measurements. And each Resideo accused product does this to achieve the same result of having outside temperature information (e.g., temperature values in degrees F or C) for use in providing various features, such as Energy Care. To the extent the weather data is processed, normalized, or reformatted before, during, or after it is collected, this would still be literal infringement or insubstantially different from the claim limitation.

The Accused Products/Instrumentalities further include one or more processors that compare said temperature measurements from said first location over time. The one or more processors (e.g., the processors used for Energy Care, alone or in combination with the thermostat processor(s)) compare the inside temperature measurements from said first location over time. They also compare the inside temperatures with outside temperatures over time. These comparisons are performed with, e.g., the Energy Care feature, including the Resideo Cloud Technology and the Home Thermodynamic Model and other aspects of the Energy Care feature described on the Resideo Energy Care website. These features involve, *inter alia*, comparing the past inside temperatures with other inside temperatures and with the outside temperatures received from the weather service over time in order to generate a model that predicts expected temperature measurements based on the past inside temperature measurements and the received outside weather data containing outside temperature measurements. The Energy Care features also compare the temperature data for several purposes, including, *inter alia*, e.g., model training, model evaluation, updating the model, instantiating the model, pre-cooling or pre-

heating, evaluating setpoint strategies, evaluating control strategies, evaluating energy efficiency, energy analysis, energy savings analysis, generating metrics about the user's HVAC system and home. See, e.g., www.resideo.com/us/en/energy-care/ ("Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year...Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers...Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn...Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly."). As an example, Energy Care can not only use "integrals and heat transfer equations," "analyzing large volumes of data," to develop a "more precise understanding of current and expected local weather conditions, and how a home will react to them" to "optimize thermostat settings each day" but also "recalculates settings on-the-fly," which is another example of comparing inside temperatures with inside temperatures, as well as of comparing inside and outside temperatures. For example, Energy Care calculates "how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable" based on and in response to the weather.

See, e.g., T Series Comparison Chart, available at <https://digitalassets.resideo.com/damroot/Original/10014/03-00306.pdf>:

T SERIES COMPARISON CHART

Thermostat	Thermostat name	Program options	Power method	Display size	Stages	Dual fuel	Ventilation with ERV/HRV or damper	Wired indoor/outdoor sensors	Service reminders
	T10 Pro Smart with RedLINK® Room Sensor THX321WFS2001W RedLINK® Room Sensor (2-pack) C7189R2002-2	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T10 Pro Smart THX321WF2003W	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T6 Pro Smart TH632DWF2003	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes	Yes	Yes
	T6 Pro Smart TH622DWF2006	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	No	No	Yes	Yes
	T6 Pro Z-Wave® TH6320ZW2003	7-day, 5-2, 5-1-1, non-programmable or occupancy controlled	Battery or C-wire	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Yes
	T6 Pro Hydronic TH6100AF2004	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	1 Stage Hot Water Heat Only – No Fan	No	No	Yes	No
	T6 Pro TH6320U2008	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6220U2000	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6210U2001	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4210U2002	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4110U2005	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	1H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T3 Pro TH3210U2004	Non-programmable	Battery or C-wire	3.32 sq. in.	2H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T3 Pro TH3110U2008	Non-programmable	Battery or C-wire	3.32 sq. in.	1H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T1 Pro TH1110D2009	Non-programmable	Battery or C-wire	2.37 sq. in.	1H/1C Conventional or 1H/1C Heat Pump	No	No	No	No
	T1 Pro TH1010D2000	Non-programmable	Battery or C-wire	2.37 sq. in.	1 stage heat-only or cool-only	No	No	No	No

	<p>See, e.g., T6 Pro, T10 Pro brochures and data sheets.</p>
--	--

	<p>As another example, see, e.g., Energy Care home page snapshots, https://www.resideo.com/us/en/energy-care/:</p>
--	---

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

ENERGY CARE

TURBO BOOST YOUR SMART THERMOSTAT.

Your smart thermostat already keeps your home's temperature just how you like it. But what if there was a way for it to adapt to your surroundings even further, based on your daily routine? Now there is, with Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year.

BUY NOW

FEEDBACK

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HANDLE YOUR HOME WITH CARE

Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers.

Resideo Energy Care

Copy link

70

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, with a search icon and a FIND A PRO button. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area features three sections:

- MONITORING THE WEATHER:** Accompanied by an illustration of a sun behind a cloud with rain. Text: "Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn."
- READING THE ROOM:** Accompanied by an illustration of a house with a pie chart and a line graph. Text: "Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature."
- GETTING TO KNOW YOUR HOME:** Accompanied by an illustration of a person's head with a pie chart and a line graph.

A vertical FEEDBACK button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an AGREE button.

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

GETTING TO KNOW YOUR HOME

Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door. Now that's a warm welcome.

POWERFUL FEATURES THAT WORK IN HARMONY

On their own, each of these factors don't have much of an impact. But when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.

HOW DOES IT WORK?

Big changes in temperature are not stress on heating, ventilation, and air conditioning.

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar features the Resideo logo and links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and a shopping cart icon are also present.

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilating, and air conditioning (HVAC) systems. Energy Care prevents this, instead keeping temperature transitions smooth. It does this by:

1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures.
2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort.
3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times.

The graph below illustrates HVAC energy savings in a cooling setting.

With Energy Care Without Energy Care

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The page features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below this is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a search bar labeled FIND A PRO. The main content area includes a sub-navigation bar with links for FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The central graphic is a line chart titled 'MANAGE ENERGY, JUST BY BEING YOU'. The chart compares 'With Energy Care' (green line) and 'Without Energy Care' (grey line) across five stages: Sleeping, Leave home, Out for the day, Arrive home, and Evening. The 'Without Energy Care' line shows a significant peak in energy consumption during the 'Out for the day' stage, labeled 'Energy waste'. The 'With Energy Care' line remains consistently low. Below the chart, the text reads: 'Subscribing to Energy Care gives you:'. At the bottom, there is a section for 'RESIDEO CLOUD TECHNOLOGY' with an illustration of a smart thermostat. A cookie consent banner at the very bottom states: 'Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.' with an 'AGREE' button.

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HVAC Energy Consumption

With Energy Care Without Energy Care

Energy waste

Sleeping Leave home Out for the day Arrive home Evening

**MANAGE ENERGY,
JUST BY BEING YOU**

Subscribing to Energy Care gives you:

RESIDEO CLOUD
TECHNOLOGY

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. A banner at the top promotes a GivingTuesday campaign. The main content area features three sections: 'RESIDEO CLOUD TECHNOLOGY' with an illustration of a person and a smart thermostat, 'PERSONALIZED SAVINGS' with an illustration of a piggy bank, and 'A PLANET-FRIENDLY HOME' with an illustration of a house on a globe. A feedback button is visible on the right side. A cookie consent banner is at the bottom.

<https://www.resideo.com/us/en/energy-care/>

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | **HOW IT WORKS** | BENEFITS | BUY | FAQ

RESIDEO CLOUD TECHNOLOGY

Our cloud technology allows you to stay in control. You can easily suspend your Energy Care service by using the app or onscreen 'hold' button

PERSONALIZED SAVINGS

The data collected from the way you use your smart thermostat works with our algorithms to help you save on your HVAC energy bills.

A PLANET-FRIENDLY HOME

If you want to save energy, owning a smart thermostat is the first step. But you can

FEEDBACK

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a 'FIRST ALERT' button. Below the header is a search bar and a 'FIND A PRO' button. A secondary navigation bar lists: FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of expandable questions. The first two questions are expanded, showing their answers. A 'FEEDBACK' button is visible on the right side of the page.

What energy savings are typical with Energy Care? (+)

What are the other benefits with Energy Care? (-)

Since Resideo Energy Care is so focused on comfort after periods of energy savings, customers are often more comfortable with the service enabled than with their previous standard programmed setpoints. For example, on very cold afternoons Resideo Energy Care is going to turn the heat back up sooner than what when the programmed schedule would kick in. Also since the majority of Resideo Energy Care's energy savings are coming from reducing the amount of time the heating and cooling system runs each day, it can often extend the lifetime of those systems.

How Does Energy Care Work? (+)

Sounds cool, but can't I just do this myself? (+)

Does weather really make that much of an impact on my heating and cooling costs? (+)

How is Energy Care different from other energy tools and programs? (+)

How is Energy Care different from the programs my utility provides? (+)

Can I turn Energy Care off in the home? (+)

How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK

resideo.com

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

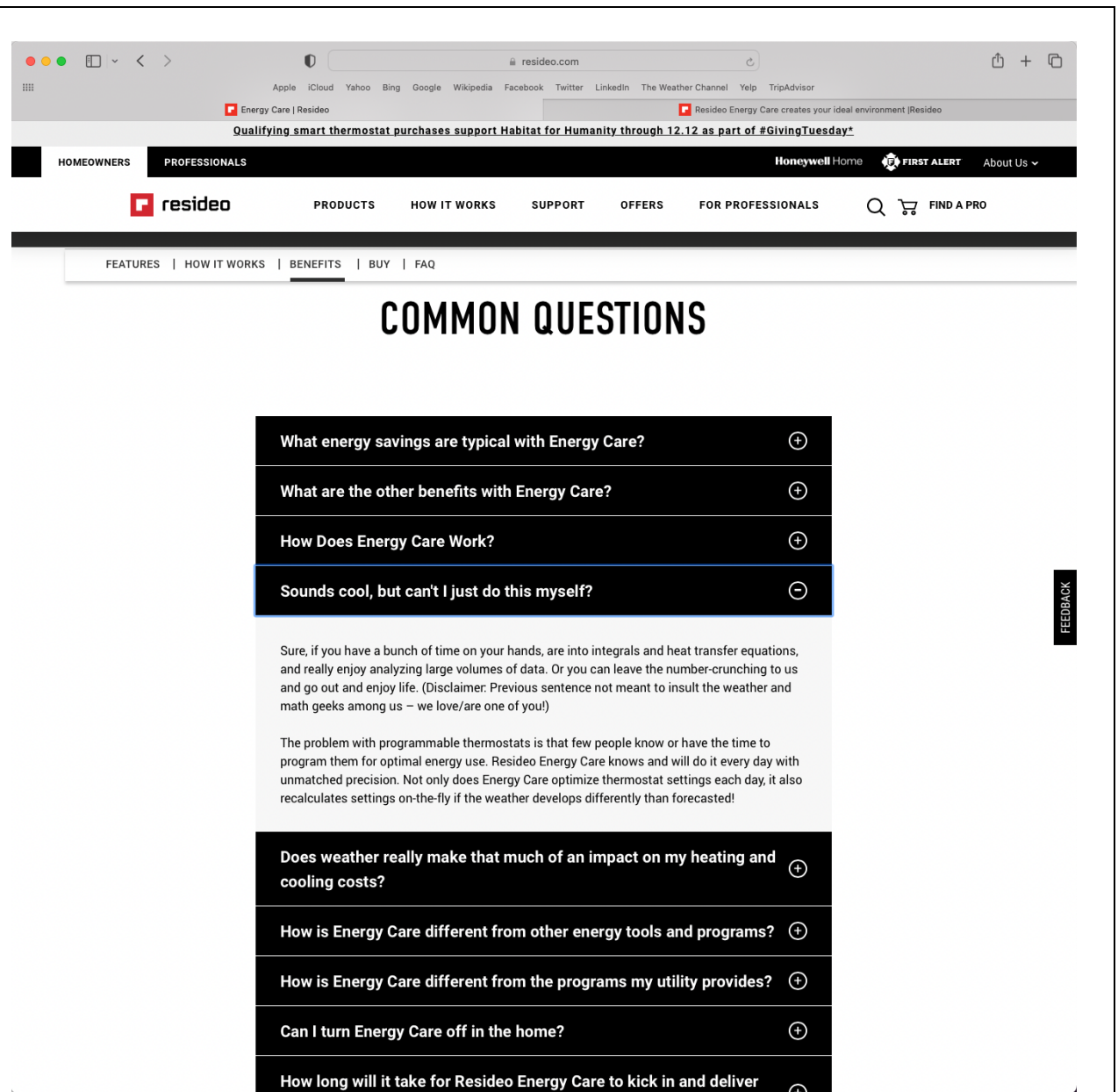
FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

COMMON QUESTIONS

- What energy savings are typical with Energy Care? +
- What are the other benefits with Energy Care? +
- How Does Energy Care Work? -**
- Sounds cool, but can't I just do this myself? +
- Does weather really make that much of an impact on my heating and cooling costs? +
- How is Energy Care different from other energy tools and programs? +
- How is Energy Care different from the programs my utility provides? +
- Can I turn Energy Care off in the home? +
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? +

Resideo Energy Care uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer's selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.

FEEDBACK



The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable/collapsible icons. The question 'Sounds cool, but can't I just do this myself?' is currently expanded, showing a detailed answer. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (-)**

Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)

The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver (+)

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows resideo.com. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. Below the header, a navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and a shopping cart icon are also present, along with a 'FIND A PRO' button.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (-)**
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)

Does weather really make that much of an impact on my heating and cooling costs?

Yes, it does. The HVAC system and the quality of construction and materials in your house matter more. But beyond that, temperature, humidity, wind, and solar are the next largest factors in determining how much you pay to keep a home comfortable day and night. Therefore, a more precise understanding of current and expected local weather conditions, and how a home will react to them allows Resideo Energy Care to optimize energy use and lower energy bills.

Weather has a big impact to the thermodynamics of every home – changing how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable. For example, the amount of energy an air conditioning unit uses to cool a home varies with outside air temperature. The hotter it is outside, the harder the air conditioner must work to keep the building cool.

FEEDBACK

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a FIRST ALERT button. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' button are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of expandable questions. The question 'How is Energy Care different from other energy tools and programs?' is currently expanded, showing a detailed answer. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (-)**

The two main differences are that Resideo Energy Care makes customer comfort its number one priority and that it's powered by the world's largest real-time weather network. We believe that keeping people comfortable is the key to keeping the service running and, ultimately, the total amount of energy saved. In the end, it is the hyperlocal weather conditions and forecasts that allow Resideo Energy Care to minimize energy use and maximize savings without sacrificing comfort.

- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. Below the header, the Resideo logo is prominently displayed, followed by links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a 'FIND A PRO' button are also visible. The main content area is titled 'COMMON QUESTIONS' and features a list of frequently asked questions, each with a plus icon to expand the answer. The questions are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?

The answer to the last question is expanded, showing the following text:

We work with utilities around the US to provide you with two types of programs.

- Demand Response: These programs bring you rewards and rebates, often through bill credits, for allowing your utility to make small adjustments during peak times of demand each year, helping to reduce stress on the energy grid in your area.
- Energy Efficiency: This is where Resideo Energy Care fits in. Some utilities will pay for this service for you, so they can reduce costs to acquire new energy. If your utility doesn't offer this, you can purchase Energy Care for \$9.99/year from Resideo.
- Check for [local programs here](#).

At the bottom of the list, the question 'Can I turn Energy Care off in the home?' is visible with a plus icon.

A vertical 'FEEDBACK' button is located on the right side of the page.

<p>1[c] one or more databases that store at least said temperatures measured at said first location over time,</p>	<p>The Accused Products/Instrumentalities includes one or more databases that store at least said temperatures measured at said first location over time. See 1[a] and additional evidence/explanation cited therein.</p> <p>For example, the Accused Products/Instrumentalities includes one or more databases corresponding to Resideo Cloud Technology database(s) that are used for Energy Care. The database(s) exist in the cloud and are controlled by Resideo cloud server technology that receives inside temperature data from the connected thermostats over time. The database that stores the inside temperatures is used for the Energy Care Home Thermodynamic cloud technology and the energy model trained and used for Energy Care. See, e.g., www.resideo.com/us/en/energy-care/ (Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.”); (“Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”); (Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them,” not only to “optimize thermostat settings each day” but also “recalculates settings on-the-fly”); (Energy Care calculates “how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable” based on and in response to the weather.)</p>

	<p>As another example, see, e.g., Energy Care home page snapshots, https://www.resideo.com/us/en/energy-care/:</p>
--	---

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

ENERGY CARE

TURBO BOOST YOUR SMART THERMOSTAT.

Your smart thermostat already keeps your home's temperature just how you like it. But what if there was a way for it to adapt to your surroundings even further, based on your daily routine? Now there is, with Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year.

BUY NOW

FEEDBACK

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HANDLE YOUR HOME WITH CARE

Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers.

Resideo Energy Care Copy link

70

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

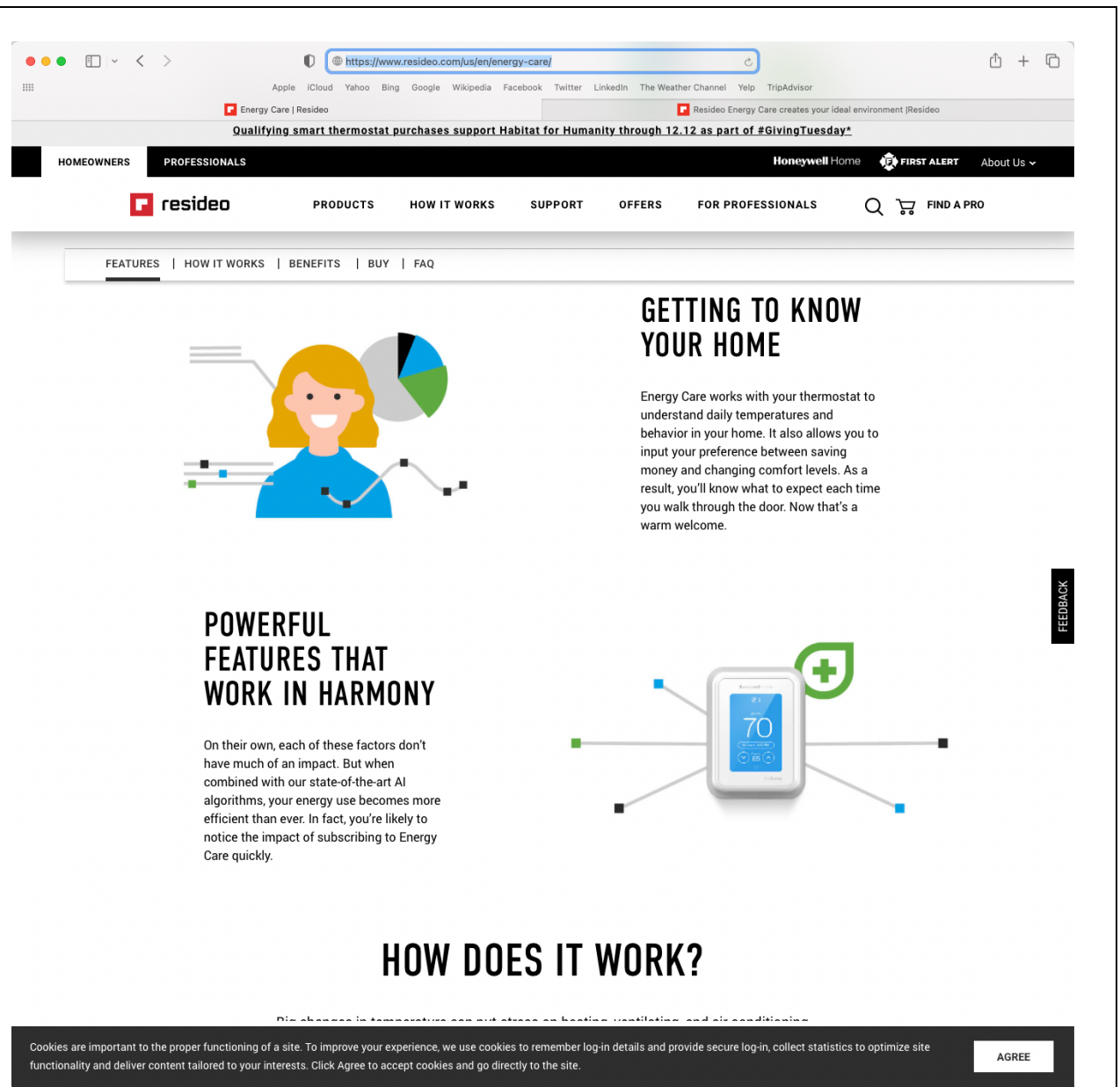
AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, with a search icon and a FIND A PRO button. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area is divided into three sections:

- MONITORING THE WEATHER:** Accompanied by an illustration of a sun behind a cloud with rain. The text states: "Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn."
- READING THE ROOM:** Accompanied by an illustration of a house with a pie chart and a line graph. The text states: "Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature."
- GETTING TO KNOW YOUR HOME:** Accompanied by an illustration of a person's head with a pie chart and a line graph. The text is partially visible: "Energy Care works with your thermostat to..."

A vertical FEEDBACK button is located on the right side of the page. At the bottom, a cookie consent banner reads: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an AGREE button.



https://www.resideo.com/us/en/energy-care/

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

GETTING TO KNOW YOUR HOME

Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door. Now that's a warm welcome.

POWERFUL FEATURES THAT WORK IN HARMONY

On their own, each of these factors don't have much of an impact. But when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilation, and air conditioning.

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar features links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar with a magnifying glass icon and the text 'FIND A PRO' is also present.

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilating, and air conditioning (HVAC) systems. Energy Care prevents this, instead keeping temperature transitions smooth. It does this by:

1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures.
2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort.
3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times.

The graph below illustrates HVAC energy savings in a cooling setting.

With Energy Care Without Energy Care

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar features the Resideo logo and links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a FIND A PRO button are also present.

The main content area features a large graphic illustrating HVAC energy consumption. The graphic is divided into two sections: "With Energy Care" and "Without Energy Care". The "With Energy Care" section shows a dark blue background with a crescent moon and a horizontal line representing energy consumption. The "Without Energy Care" section shows a light gray background with a sun and a line representing energy consumption. The line for "Without Energy Care" shows a significant peak during the "Out for the day" period, labeled "Energy waste". The line for "With Energy Care" remains relatively flat, indicating lower energy consumption.

Below the graphic, the text reads: **MANAGE ENERGY, JUST BY BEING YOU**. Underneath this, it says: "Subscribing to Energy Care gives you:". At the bottom of the page, there is a section for "RESIDEO CLOUD TECHNOLOGY" and a cookie consent banner that states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." An "AGREE" button is located to the right of the cookie banner.

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home. A banner at the top states: "Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*". The main content area is divided into three sections:

- RESIDEO CLOUD TECHNOLOGY**: Accompanied by an illustration of a person and a smart thermostat. Text: "Our cloud technology allows you to stay in control. You can easily suspend your Energy Care service by using the app or onscreen 'hold' button".
- PERSONALIZED SAVINGS**: Accompanied by an illustration of a piggy bank with coins. Text: "The data collected from the way you use your smart thermostat works with our algorithms to help you save on your HVAC energy bills."
- A PLANET-FRIENDLY HOME**: Accompanied by an illustration of a house on a globe. Text: "If you want to save energy, owning a smart thermostat is the first step. But you can".

A vertical "FEEDBACK" button is located on the right side of the page. At the bottom, a cookie consent banner reads: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an "AGREE" button.

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a 'FIRST ALERT' button. Below the header is a navigation bar with links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. A secondary navigation bar contains links to FEATURES, HOW IT WORKS, BENEFITS (which is underlined), BUY, and FAQ.

COMMON QUESTIONS

What energy savings are typical with Energy Care? ⊕

What are the other benefits with Energy Care? ⊖

Since Resideo Energy Care is so focused on comfort after periods of energy savings, customers are often more comfortable with the service enabled than with their previous standard programed setpoints. For example, on very cold afternoons Resideo Energy Care is going to turn the heat back up sooner than what when the programmed schedule would kick in. Also since the majority of Resideo Energy Care's energy savings are coming from reducing the amount of time the heating and cooling system runs each day, it can often extend the lifetime of those systems.

How Does Energy Care Work? ⊕

Sounds cool, but can't I just do this myself? ⊕

Does weather really make that much of an impact on my heating and cooling costs? ⊕

How is Energy Care different from other energy tools and programs? ⊕

How is Energy Care different from the programs my utility provides? ⊕

Can I turn Energy Care off in the home? ⊕

How long will it take for Resideo Energy Care to kick in and deliver some benefits? ⊕

FEEDBACK

--	--

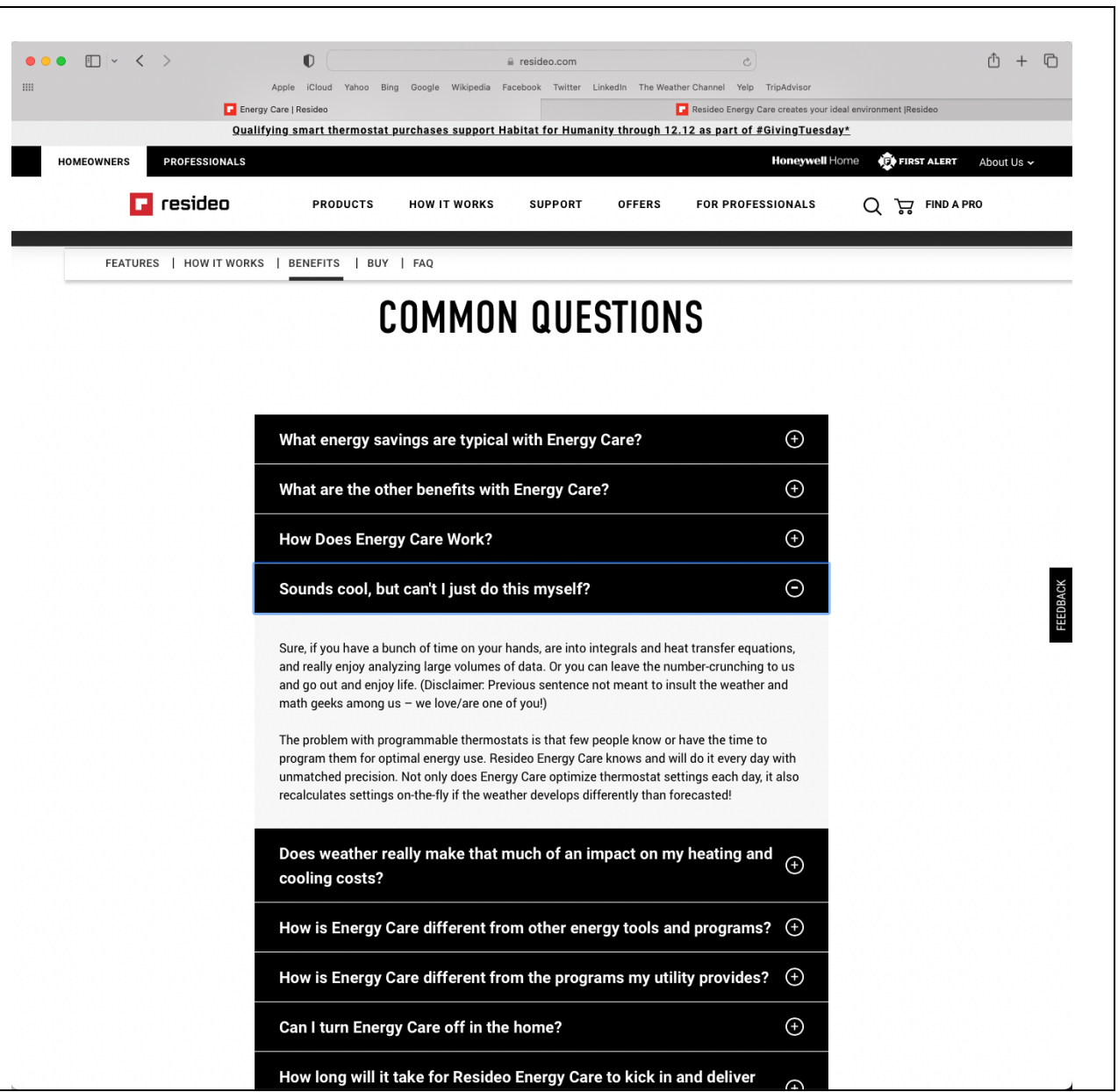
The screenshot displays the Resideo Energy Care website. The header includes navigation links for HOMEOWNERS and PROFESSIONALS, along with a Honeywell Home logo and a FIRST ALERT button. The main navigation bar features the Resideo logo and links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a shopping cart icon are also present.

The 'COMMON QUESTIONS' section is highlighted in the breadcrumb trail. The questions listed are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?** (Expanded)
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?
- How long will it take for Resideo Energy Care to kick in and deliver some benefits?

The expanded answer for 'How Does Energy Care Work?' states: "Resideo Energy Care uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer's selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort."

A vertical 'FEEDBACK' button is located on the right side of the page.



The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar with a magnifying glass icon and the text 'FIND A PRO' is also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The 'COMMON QUESTIONS' section is prominently displayed with a large heading. Below this heading is a list of questions, each with a plus or minus icon to its right. The question 'Sounds cool, but can't I just do this myself?' is currently selected, indicated by a blue highlight and a minus icon. The answer to this question is displayed in a light gray box. The answer text reads: 'Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)' and 'The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!'. Below the answer, there are five more questions, each with a plus icon to its right. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

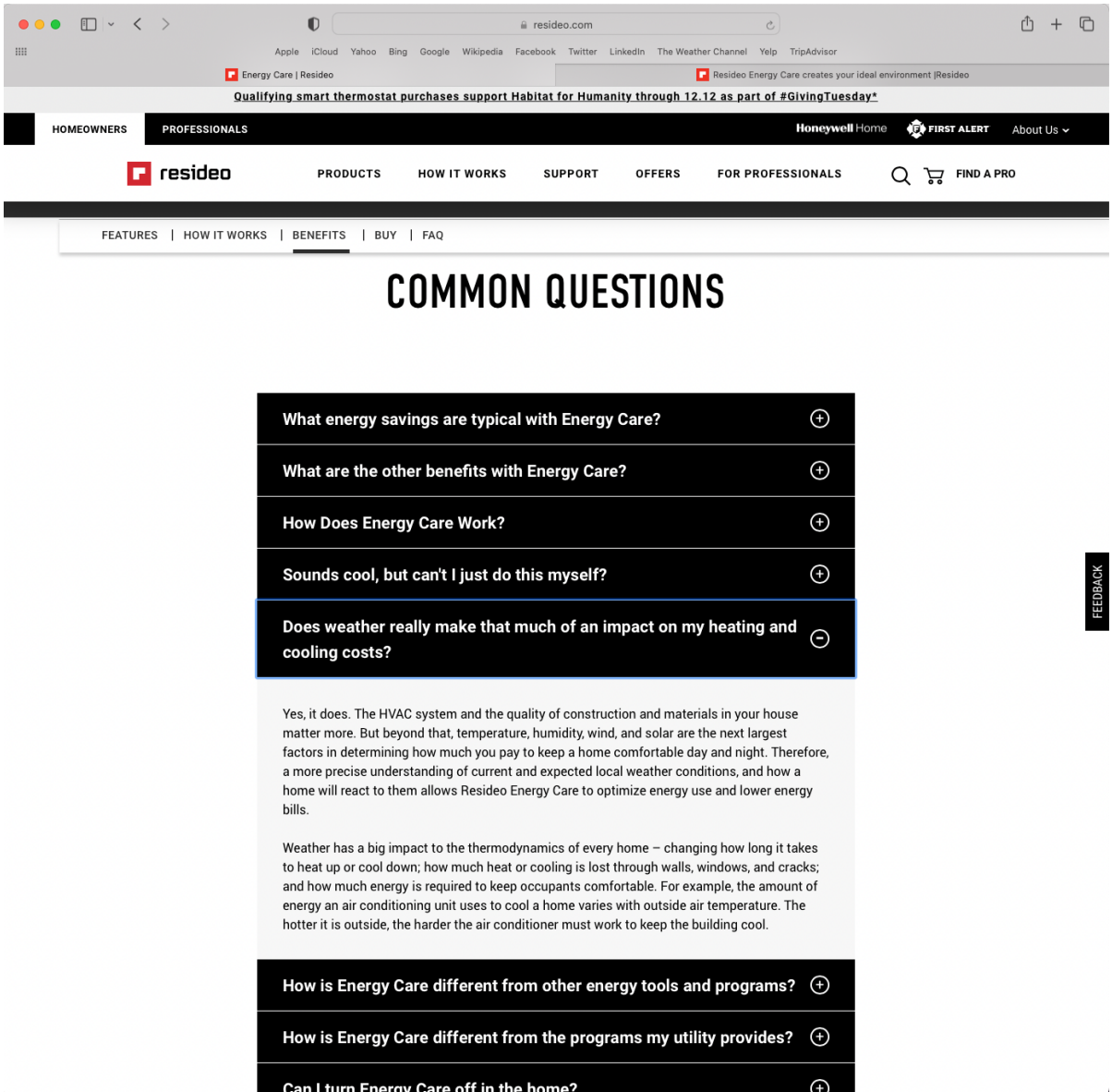
- What energy savings are typical with Energy Care? +
- What are the other benefits with Energy Care? +
- How Does Energy Care Work? +
- Sounds cool, but can't I just do this myself? -**

Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)

The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!

- Does weather really make that much of an impact on my heating and cooling costs? +
- How is Energy Care different from other energy tools and programs? +
- How is Energy Care different from the programs my utility provides? +
- Can I turn Energy Care off in the home? +
- How long will it take for Resideo Energy Care to kick in and deliver +

FEEDBACK



The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a FIRST ALERT button. The main navigation bar features the Resideo logo, PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a shopping cart icon are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and displays a list of questions with expandable answers. The questions are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?

The answer to the question 'Does weather really make that much of an impact on my heating and cooling costs?' is expanded and reads:

Yes, it does. The HVAC system and the quality of construction and materials in your house matter more. But beyond that, temperature, humidity, wind, and solar are the next largest factors in determining how much you pay to keep a home comfortable day and night. Therefore, a more precise understanding of current and expected local weather conditions, and how a home will react to them allows Resideo Energy Care to optimize energy use and lower energy bills.

Weather has a big impact to the thermodynamics of every home – changing how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable. For example, the amount of energy an air conditioning unit uses to cool a home varies with outside air temperature. The hotter it is outside, the harder the air conditioner must work to keep the building cool.

A vertical 'FEEDBACK' button is located on the right side of the page.

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a FIRST ALERT button. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable/collapsible icons (+/-). The question 'How is Energy Care different from other energy tools and programs?' is currently expanded, showing the following text: 'The two main differences are that Resideo Energy Care makes customer comfort its number one priority and that it's powered by the world's largest real-time weather network. We believe that keeping people comfortable is the key to keeping the service running and, ultimately, the total amount of energy saved. In the end, it is the hyperlocal weather conditions and forecasts that allow Resideo Energy Care to minimize energy use and maximize savings without sacrificing comfort.'

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (-)**

The two main differences are that Resideo Energy Care makes customer comfort its number one priority and that it's powered by the world's largest real-time weather network. We believe that keeping people comfortable is the key to keeping the service running and, ultimately, the total amount of energy saved. In the end, it is the hyperlocal weather conditions and forecasts that allow Resideo Energy Care to minimize energy use and maximize savings without sacrificing comfort.
- How is Energy Care different from the programs my utility provides? (+)
- Can I turn Energy Care off in the home? (+)
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK

The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home. A secondary navigation bar contains the Resideo logo, PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a FIND A PRO button. Below this is a horizontal menu with FEATURES, HOW IT WORKS, BENEFITS (highlighted), BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of seven expandable questions, each with a plus or minus icon. The first six questions are expanded, showing their answers. The seventh question, 'Can I turn Energy Care off in the home?', is collapsed. A vertical 'FEEDBACK' button is located on the right side of the page.

COMMON QUESTIONS

- What energy savings are typical with Energy Care? (+)
- What are the other benefits with Energy Care? (+)
- How Does Energy Care Work? (+)
- Sounds cool, but can't I just do this myself? (+)
- Does weather really make that much of an impact on my heating and cooling costs? (+)
- How is Energy Care different from other energy tools and programs? (+)
- How is Energy Care different from the programs my utility provides? (-)

We work with utilities around the US to provide you with two types of programs.

- Demand Response: These programs bring you rewards and rebates, often through bill credits, for allowing your utility to make small adjustments during peak times of demand each year, helping to reduce stress on the energy grid in your area.
- Energy Efficiency: This is where Resideo Energy Care fits in. Some utilities will pay for this service for you, so they can reduce costs to acquire new energy. If your utility doesn't offer this, you can purchase Energy Care for \$9.99/year from Resideo.
- Check for [local programs here](#).

Can I turn Energy Care off in the home? (+)

<p>1[d] wherein said one or more processors compares an inside temperature recorded inside the first structure with an inside temperature of said first structure recorded at a different time to determine whether the operational efficiency of the HVAC system has decreased over time.</p>	<p>The Accused Products/Instrumentalities include said one or more processors that compares an inside temperature recorded inside the first structure with an inside temperature of said first structure recorded at a different time to determine whether the operational efficiency of the HVAC system has decreased over time.</p> <p>See 1[pre].</p> <p>The one or more processors (e.g., the processors used for Energy Care, alone or in combination with the thermostat processor(s)) compares an inside temperature recorded inside the first structure with an inside temperature of said first structure recorded at a different time to determine whether the operational efficiency of the HVAC system has decreased over time with e.g., the Energy Care feature, including the Resideo Cloud Technology and the Home Thermodynamic Model and other aspects of the Energy Care feature described on the Resideo Energy Care website. See also related or similar energy features under alternative branding, such as energy efficiency or community savings. These features involve, <i>inter alia</i>, comparing the inside temperatures received using the thermostat with other inside temperatures received from the thermostat over time in order to generate or use a thermodynamic model. Training, updating, and/or using model includes compares an inside temperature recorded inside the first structure with an inside temperature of said first structure recorded at a different time to determine whether the operational efficiency of the HVAC system has decreased over time. Energy Care performs this evaluation for several purposes, including, <i>inter alia</i>, e.g., model training, model evaluation, updating the model, instantiating the model, pre-cooling or pre-heating, evaluating setpoint strategies, evaluating control strategies, evaluating energy efficiency, energy analysis, energy savings analysis, generating metrics about the user's HVAC system and home. See, e.g., www.resideo.com/us/en/energy-care/ ("Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year...Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers...Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn...Thanks to Home</p>
--	---

Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.”). As an example, Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them” to “optimize thermostat settings each day” but also “recalculates settings on-the-fly.” For example, Energy Care calculates **“how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable”** based on and in response to the weather. See, e.g., www.resideo.com/us/en/energy-care/ . Further, Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.” These descriptions of Resideo’s energy modeling, including how the feature analyzes the home and HVAC system over time, show that the Accused Products/Instrumentalities processors perform comparing an inside temperature recorded inside the first structure with an inside temperature of said first structure recorded at a different time to determine whether the operational efficiency of the HVAC system has decreased over time..

To the extent Resideo disputes infringement of “determining operational efficiency has decreased over time,” there would also be infringement under the doctrine of equivalents, because Resideo’s Accused Instrumentalities perform the same function of evaluating changes in the energy or time required by the HVAC system to change inside temperature by a given

	<p>amount for a set of indoor and outdoor conditions in substantially the same way, by using the Resideo Energy Care Thermodynamic model and/or custom energy model to model the thermodynamic properties of the home and HVAC system, which allows for understanding changes in how much time the HVAC system will require to change inside temperatures in response to outside temperatures, and/or generating pre-cooling or pre-heating strategies based on the model's computed values, and/or generating energy efficiency graphs and metrics based on the energy model showing changes over time, which achieves substantially the same result of calculating how efficient the HVAC system is at changing inside temperatures in response to outside temperatures and evaluating changes in operational efficiency of the HVAC system in order to track and optimize energy efficiency.</p> <p>See, e.g., T Series Comparison Chart, available at https://digitalassets.resideo.com/damroot/Original/10014/03-00306.pdf:</p>
--	--

T SERIES COMPARISON CHART

Thermostat	Thermostat name	Program options	Power method	Display size	Stages	Dual fuel	Ventilation with ERV/HRV or damper	Wired indoor/outdoor sensors	Service reminders
	T10 Pro Smart with RedLINK® Room Sensor THX321WFS2001W RedLINK® Room Sensor (2-pack) C7189R2002-2	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T10 Pro Smart THX321WF2003W	Geofencing, 7-day, 5-2, 5-1-1, 1 or non-programmable	C-wire only	7.27 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes* *With humidifier, dehumidifier, or ventilator capabilities	Yes	Yes
	T6 Pro Smart TH632DWF2003	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	Yes	Yes	Yes
	T6 Pro Smart TH622DWF2006	Geofencing, 7-day, 5-2, 5-1-1 or non-programmable	C-wire only	6.89 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	No	No	Yes	Yes
	T6 Pro Z-Wave® TH6320ZW2003	7-day, 5-2, 5-1-1, non-programmable or occupancy controlled	Battery or C-wire	6.89 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Yes
	T6 Pro Hydronic TH6100AF2004	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	1 Stage Hot Water Heat Only – No Fan	No	No	Yes	No
	T6 Pro TH6320U2008	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	3H/2C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6220U2000	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 2H/2C Conventional	Yes	No	Yes	Limited
	T6 Pro TH6210U2001	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	5.44 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4210U2002	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	2H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T4 Pro TH4110U2005	7-day, 5-2, 5-1-1 or non-programmable	Battery or C-wire	3.93 sq. in.	1H/1C Heat Pump + 1H/1C Conventional	No	No	No	Limited
	T3 Pro TH3210U2004	Non-programmable	Battery or C-wire	3.32 sq. in.	2H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T3 Pro TH3110U2008	Non-programmable	Battery or C-wire	3.32 sq. in.	1H/1C Heat Pumps + 1H/1C Conventional Systems	No	No	No	No
	T1 Pro TH1110D2009	Non-programmable	Battery or C-wire	2.37 sq. in.	1H/1C Conventional or 1H/1C Heat Pump	No	No	No	No
	T1 Pro TH1010D2000	Non-programmable	Battery or C-wire	2.37 sq. in.	1 stage heat-only or cool-only	No	No	No	No

	<p>See, e.g., T6 Pro, T10 Pro brochures and data sheets.</p>
--	--

	<p>As another example, see, e.g., Energy Care home page snapshots, https://www.resideo.com/us/en/energy-care/:</p>
--	---

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

ENERGY CARE

TURBO BOOST YOUR SMART THERMOSTAT.

Your smart thermostat already keeps your home's temperature just how you like it. But what if there was a way for it to adapt to your surroundings even further, based on your daily routine? Now there is, with Resideo Energy Care – a subscription service that uses Resideo Cloud Technology to make your smart thermostat save even more energy. All for just \$9.99 a year.

BUY NOW

FEEDBACK

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HANDLE YOUR HOME WITH CARE

Energy Care pays attention to your home and how you're using it. It then creates your ideal environment to help you save energy. This is on top of the savings a standard Honeywell Home Smart Thermostat already delivers.

Resideo Energy Care

Copy link

70

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, and Honeywell Home, along with a FIRST ALERT button and an About Us link. The main navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, with a search icon and a FIND A PRO button. A secondary navigation bar includes FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ.

The main content area features three sections:

- MONITORING THE WEATHER:** Accompanied by an illustration of a sun behind a cloud with rain. Text: "Energy Care constantly watches the local weather forecast to make sure your home responds accordingly when we're saving energy, and when the weather heats up, your home will cool down in time to keep you comfortable. It's always prepared – even when the weather takes a sudden turn."
- READING THE ROOM:** Accompanied by an illustration of a house with a pie chart and a line graph. Text: "Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature."
- GETTING TO KNOW YOUR HOME:** Accompanied by an illustration of a person's head with a pie chart and a line graph.

A vertical FEEDBACK button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an AGREE button.

The screenshot displays the Resideo Energy Care website. The browser address bar shows <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. A secondary navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, along with a search icon and a FIND A PRO button. Below this is a sub-navigation bar with FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area features a large illustration of a woman with a pie chart and a line graph, representing data analysis. To the right, the text reads: "GETTING TO KNOW YOUR HOME" followed by a paragraph explaining how Energy Care works with a thermostat to understand daily temperatures and behavior, allowing users to input preferences for saving money and changing comfort levels. Below this, the text "POWERFUL FEATURES THAT WORK IN HARMONY" is displayed, followed by a paragraph explaining that combining various factors with state-of-the-art AI algorithms leads to more efficient energy use. To the right of this text is an illustration of a smart thermostat with a green plus sign icon. At the bottom, the text "HOW DOES IT WORK?" is visible. A footer section contains a cookie notice and an AGREE button. A vertical FEEDBACK button is located on the right side of the page.

<https://www.resideo.com/us/en/energy-care/>

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

GETTING TO KNOW YOUR HOME

Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you'll know what to expect each time you walk through the door. Now that's a warm welcome.

POWERFUL FEATURES THAT WORK IN HARMONY

On their own, each of these factors don't have much of an impact. But when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you're likely to notice the impact of subscribing to Energy Care quickly.

HOW DOES IT WORK?

Big changes in temperature are not stress on heating, ventilation, and air conditioning.

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

FEEDBACK

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar features the Resideo logo and links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A secondary navigation bar includes links to FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled "HOW DOES IT WORK?" and explains that big changes in temperature can stress HVAC systems, which Energy Care prevents by keeping transitions smooth. It lists three steps: 1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures. 2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort. 3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times. Below the text, a graph illustrates HVAC energy savings in a cooling setting, comparing "With Energy Care" (green bar) and "Without Energy Care" (light green bar). The graph shows a significant reduction in energy consumption with Energy Care. A dark blue night sky with a crescent moon is shown on the left, and a bright yellow sun is shown on the right. A vertical "FEEDBACK" button is located on the right side of the page. At the bottom, a cookie consent banner states: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an "AGREE" button.

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HOW DOES IT WORK?

Big changes in temperature can put stress on heating, ventilating, and air conditioning (HVAC) systems. Energy Care prevents this, instead keeping temperature transitions smooth. It does this by:

1. Discovering periods in a smart thermostat's operation that can run at more efficient temperatures.
2. Adapting to user interaction with desired temperatures and preference of energy saving or comfort.
3. Using the home's thermodynamic model and weather forecast to begin and end temperature setpoints at more efficient times.

The graph below illustrates HVAC energy savings in a cooling setting.

With Energy Care Without Energy Care

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The page features a navigation bar with links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. Below this is a secondary navigation bar with links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, FOR PROFESSIONALS, and a search bar labeled FIND A PRO. The main content area includes a sub-navigation bar with links for FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The central graphic is a line chart titled 'MANAGE ENERGY, JUST BY BEING YOU'. The chart compares 'With Energy Care' (green line) and 'Without Energy Care' (grey line) across five stages: Sleeping, Leave home, Out for the day, Arrive home, and Evening. The 'Without Energy Care' line shows a significant peak in energy consumption during the 'Out for the day' stage, labeled 'Energy waste'. The 'With Energy Care' line remains consistently low. Below the chart, the text reads: 'Subscribing to Energy Care gives you:'. At the bottom, there is a section for 'RESIDEO CLOUD TECHNOLOGY' with an illustration of a smart thermostat. A cookie consent banner at the very bottom states: 'Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.' with an 'AGREE' button.

https://www.resideo.com/us/en/energy-care/

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

HVAC Energy Consumption

With Energy Care Without Energy Care

Energy waste

Sleeping Leave home Out for the day Arrive home Evening

MANAGE ENERGY, JUST BY BEING YOU

Subscribing to Energy Care gives you:

RESIDEO CLOUD TECHNOLOGY

Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site.

AGREE

The screenshot displays the Resideo Energy Care website. The browser address bar shows the URL <https://www.resideo.com/us/en/energy-care/>. The website header includes navigation links for HOMEOWNERS, PROFESSIONALS, Honeywell Home, FIRST ALERT, and About Us. A secondary navigation bar lists PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS, along with a search icon and a 'FIND A PRO' button. A sub-navigation bar contains FEATURES, HOW IT WORKS (highlighted), BENEFITS, BUY, and FAQ.

The main content area features three sections:

- RESIDEO CLOUD TECHNOLOGY:** Accompanied by an illustration of a person looking at a screen showing a house and a line graph. The text states: "Our cloud technology allows you to stay in control. You can easily suspend your Energy Care service by using the app or onscreen 'hold' button".
- PERSONALIZED SAVINGS:** Accompanied by an illustration of a piggy bank with coins. The text states: "The data collected from the way you use your smart thermostat works with our algorithms to help you save on your HVAC energy bills."
- A PLANET-FRIENDLY HOME:** Accompanied by an illustration of a house on a globe. The text states: "If you want to save energy, owning a smart thermostat is the first step. But you can".

A vertical 'FEEDBACK' button is located on the right side of the page. At the bottom, a cookie consent banner reads: "Cookies are important to the proper functioning of a site. To improve your experience, we use cookies to remember log-in details and provide secure log-in, collect statistics to optimize site functionality and deliver content tailored to your interests. Click Agree to accept cookies and go directly to the site." with an 'AGREE' button.

The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo with a FIRST ALERT button. Below the header is a navigation bar with links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' button are also present. A secondary navigation bar lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of expandable FAQs. The first two questions are expanded, showing their answers. A vertical 'FEEDBACK' button is located on the right side of the page.

What energy savings are typical with Energy Care? (+)

What are the other benefits with Energy Care? (-)

Since Resideo Energy Care is so focused on comfort after periods of energy savings, customers are often more comfortable with the service enabled than with their previous standard programmed setpoints. For example, on very cold afternoons Resideo Energy Care is going to turn the heat back up sooner than what when the programmed schedule would kick in. Also since the majority of Resideo Energy Care's energy savings are coming from reducing the amount of time the heating and cooling system runs each day, it can often extend the lifetime of those systems.

How Does Energy Care Work? (+)

Sounds cool, but can't I just do this myself? (+)

Does weather really make that much of an impact on my heating and cooling costs? (+)

How is Energy Care different from other energy tools and programs? (+)

How is Energy Care different from the programs my utility provides? (+)

Can I turn Energy Care off in the home? (+)

How long will it take for Resideo Energy Care to kick in and deliver some benefits? (+)

FEEDBACK

resideo.com

Apple iCloud Yahoo Bing Google Wikipedia Facebook Twitter LinkedIn The Weather Channel Yelp TripAdvisor

Energy Care | Resideo

Resideo Energy Care creates your ideal environment | Resideo

Qualifying smart thermostat purchases support Habitat for Humanity through 12.12 as part of #GivingTuesday*

HOMEOWNERS PROFESSIONALS Honeywell Home FIRST ALERT About Us

resideo PRODUCTS HOW IT WORKS SUPPORT OFFERS FOR PROFESSIONALS FIND A PRO

FEATURES | HOW IT WORKS | BENEFITS | BUY | FAQ

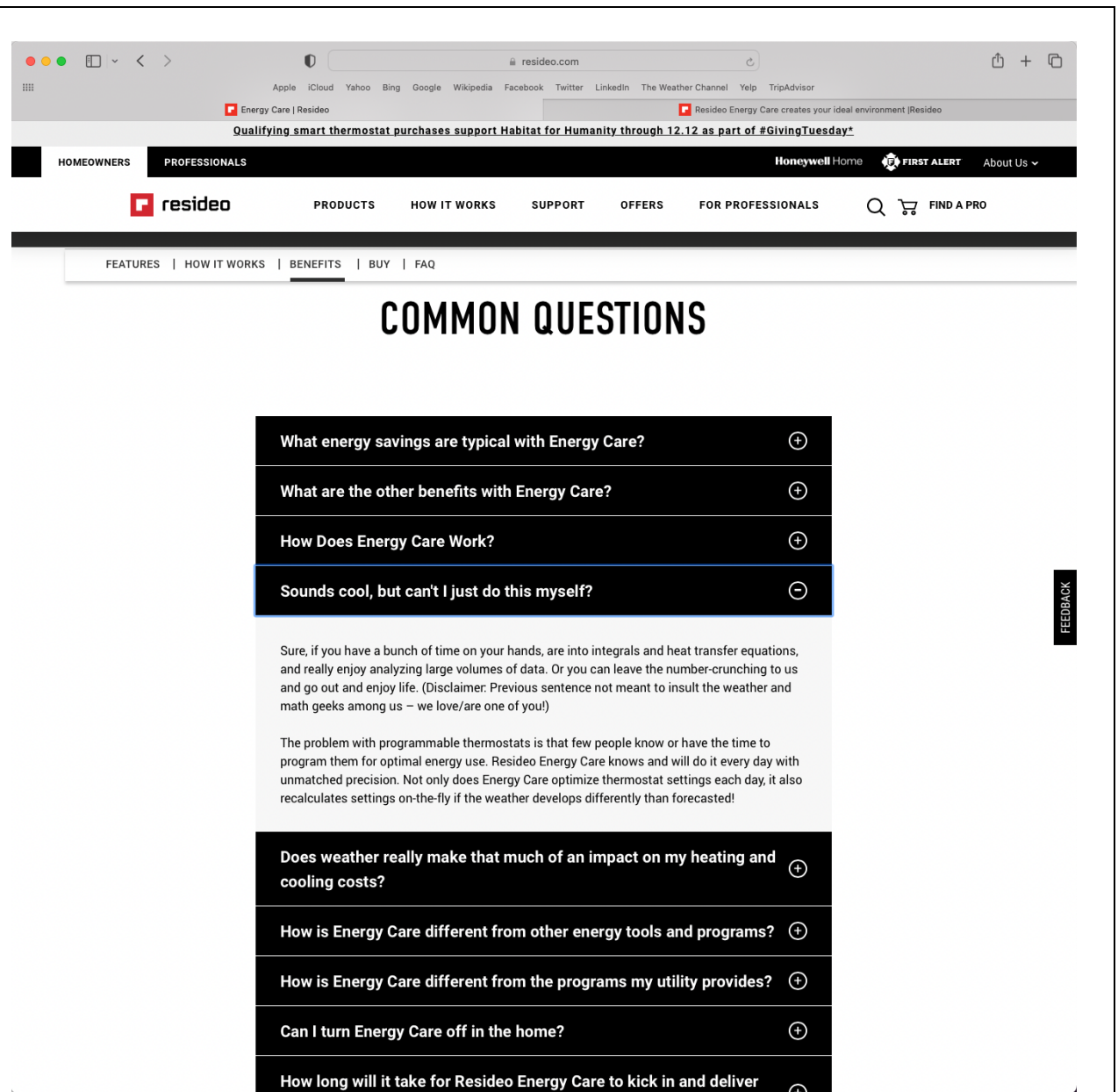
COMMON QUESTIONS

- What energy savings are typical with Energy Care? +
- What are the other benefits with Energy Care? +
- How Does Energy Care Work? -**

Resideo Energy Care uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer's selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.

- Sounds cool, but can't I just do this myself? +
- Does weather really make that much of an impact on my heating and cooling costs? +
- How is Energy Care different from other energy tools and programs? +
- How is Energy Care different from the programs my utility provides? +
- Can I turn Energy Care off in the home? +
- How long will it take for Resideo Energy Care to kick in and deliver some benefits? +

FEEDBACK



The screenshot shows the Resideo Energy Care website. The browser address bar displays 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. The main navigation bar contains links for PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search icon and 'FIND A PRO' link are also present. Below the navigation bar, a horizontal menu lists FEATURES, HOW IT WORKS, BENEFITS, BUY, and FAQ. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable answers. The questions are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?
- How long will it take for Resideo Energy Care to kick in and deliver

The answer to the question 'Sounds cool, but can't I just do this myself?' is expanded, showing two paragraphs of text. The first paragraph states: 'Sure, if you have a bunch of time on your hands, are into integrals and heat transfer equations, and really enjoy analyzing large volumes of data. Or you can leave the number-crunching to us and go out and enjoy life. (Disclaimer: Previous sentence not meant to insult the weather and math geeks among us – we love/are one of you!)' The second paragraph states: 'The problem with programmable thermostats is that few people know or have the time to program them for optimal energy use. Resideo Energy Care knows and will do it every day with unmatched precision. Not only does Energy Care optimize thermostat settings each day, it also recalculates settings on-the-fly if the weather develops differently than forecasted!' A vertical 'FEEDBACK' button is located on the right side of the page.

The screenshot displays the Resideo Energy Care website. The header includes navigation links for HOMEOWNERS and PROFESSIONALS, the Resideo logo, and various service categories like PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and 'FIND A PRO' button are also present. The main content area is titled 'COMMON QUESTIONS' and features an accordion menu with the following questions:

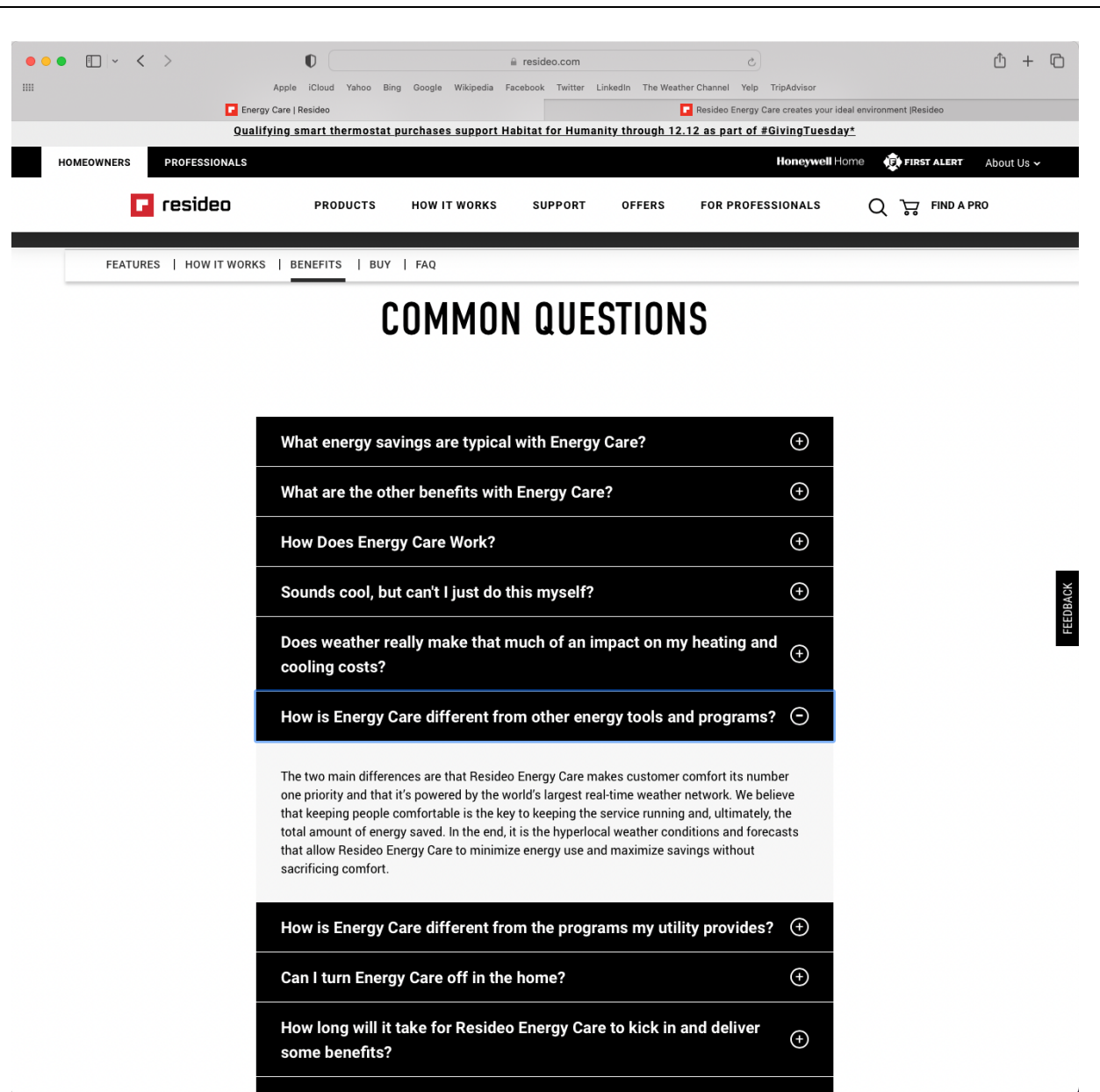
- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?** (Selected)
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?
- Can I turn Energy Care off in the home?

The selected question is expanded, revealing the following text:

Yes, it does. The HVAC system and the quality of construction and materials in your house matter more. But beyond that, temperature, humidity, wind, and solar are the next largest factors in determining how much you pay to keep a home comfortable day and night. Therefore, a more precise understanding of current and expected local weather conditions, and how a home will react to them allows Resideo Energy Care to optimize energy use and lower energy bills.

Weather has a big impact to the thermodynamics of every home – changing how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable. For example, the amount of energy an air conditioning unit uses to cool a home varies with outside air temperature. The hotter it is outside, the harder the air conditioner must work to keep the building cool.

A vertical 'FEEDBACK' button is located on the right side of the page.



The screenshot displays the Resideo Energy Care website. The browser address bar shows 'resideo.com'. The website header includes navigation links for HOMEOWNERS and PROFESSIONALS, and a Honeywell Home logo. Below the header, the Resideo logo is prominently displayed, followed by a navigation menu with links to PRODUCTS, HOW IT WORKS, SUPPORT, OFFERS, and FOR PROFESSIONALS. A search bar and a 'FIND A PRO' button are also visible. The main content area is titled 'COMMON QUESTIONS' and features a list of questions with expandable answers. The questions are:

- What energy savings are typical with Energy Care?
- What are the other benefits with Energy Care?
- How Does Energy Care Work?
- Sounds cool, but can't I just do this myself?
- Does weather really make that much of an impact on my heating and cooling costs?
- How is Energy Care different from other energy tools and programs?
- How is Energy Care different from the programs my utility provides?

The answer to the question 'How is Energy Care different from the programs my utility provides?' is expanded, showing the following text:

We work with utilities around the US to provide you with two types of programs.

- Demand Response: These programs bring you rewards and rebates, often through bill credits, for allowing your utility to make small adjustments during peak times of demand each year, helping to reduce stress on the energy grid in your area.
- Energy Efficiency: This is where Resideo Energy Care fits in. Some utilities will pay for this service for you, so they can reduce costs to acquire new energy. If your utility doesn't offer this, you can purchase Energy Care for \$9.99/year from Resideo.
- Check for [local programs here](#).

At the bottom of the list, the question 'Can I turn Energy Care off in the home?' is visible with a plus icon to its right. A vertical 'FEEDBACK' button is located on the right side of the page.

--	--

Claim 2

2. A system as in claim 1 in which said processors receive measurements of outside temperatures for geographic regions such as ZIP codes from sources other than said HVAC system.	The Accused Products/Instrumentalities include said processors that receive temperature [measurement] of outside temperatures for geographic regions comprising ZIP codes from sources other than said HVAC system. For example, this corresponds to receiving the hyperlocal weather data with the Energy Care feature as described for claim 1[c] in the chart above.
--	---

Claim 3

3. A system as in claim 1 further in which said temperature measurements are obtained from a programmable thermostat that communicates using a network.	The Accused Products/Instrumentalities can further comprise a programmable thermostat that communicates using a network such as the Internet. As only one example, the accused system can include the Resideo thermostat which communicates with the cloud servers using the Internet. This is described at length with respect to e.g. how the Energy Care feature works as described for claim 1[pre]-1[c] in the charts above.
---	---

Claim 4

4. A system as in claim 1 in which said processors communicate with said HVAC system using a network that includes an electricity meter.	The Accused Products/Instrumentalities processors (e.g., thermostat processor, or Energy Care cloud processor(s)) communicate with said HVAC system using a network that includes an electricity meter. For example, the Energy Care system establishes a network that can include an electricity meter for more accurate energy cost readings. See 1[pre] above for a description of Energy Care and its energy analysis capabilities.
--	---

Claim 5

5. A system as in claim 1 in which said HVAC system includes a programmable thermostat and said programmable thermostat is the sole source for current data regarding temperature inside said first structure conditioned by said HVAC system.

The Accused Products/Instrumentalities can further comprise a programmable thermostat that is the sole source for current data regarding inside temperature inside the location conditioned by the HVAC system. For example, the standard setup for Energy Care will be where the Resideo Thermostat is part of the claimed system and is the sole source of current inside temperature data used by Energy Care. This is described at length with respect to how the Energy Care feature works as described for claim 1[pre]-1[c] in the charts above.

See, e.g., www.resideo.com/us/en/energy-care/ (Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.”); (“Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”); (Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them,” not only to “optimize thermostat settings each day” but also “recalculates settings on-the-fly”); (Energy Care calculates “how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable” based on and in response to the weather.)

Claim 6

<p>6. A system as in claim 1 in which said HVAC system measures inside said first location at only one physical location.</p>	<p>The Accused Products/Instrumentalities can further comprise said HVAC system measures the temperature measurements inside said first structure at only one physical location, e.g., the location where the thermostat is installed. For example, the standard setup for Energy Care will be where the Resideo Thermostat is part of the claimed system and is the sole source of current inside temperature data used by Energy Care, and the only physical location is where the thermostat is installed. This is described at length with respect to how the Energy Care feature works as described for claim 1[pre]-1[c] in the charts above.</p> <p>See, e.g., www.resideo.com/us/en/energy-care/ (Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.”); (“Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”); (Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them,” not only to “optimize thermostat settings each day” but also “recalculates settings on-the-fly”); (Energy Care calculates “how long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows,</p>
---	--

	and cracks; and how much energy is required to keep occupants comfortable” based on and in response to the weather.)
--	--

Claim 7

7. A system as in claim 1 in which the status of said HVAC system includes whether said system is “on” or “off.”	<p>The Accused Products/Instrumentalities further satisfy where the status of the HVAC system includes whether said system is “on” or “off.” This is described at length with respect to how the Energy Care feature works as described for claim 1[pre]-1[c] in the charts above. The status of the HVAC system includes whether it is “on” (e.g., heating or cooling) or “off” (e.g., not heating or cooling”) and this is used by the Energy Care feature for the energy modeling.</p> <p>See, e.g., www.resideo.com/us/en/energy-care/ (Energy Care “uses data from your connected thermostat and hyperlocal weather data to develop a custom energy model of the home to understand how each one responds to varying weather conditions. Using this model, Resideo Energy Care then sends optimized thermostat schedules to participating thermostats each day based on the forecasted weather, the thermal properties of the home, and a customer’s selected comfort settings. The result is lower energy use and costs without sacrificing customer comfort.” Further, Energy Care makes sure that “when the weather heats up, your home will cool down in time to keep you comfortable.”); (“Thanks to Home Thermodynamic technology, Energy Care can learn details about the building you live in, such as insulation levels and how susceptible your home is to solar radiation and uses them to adapt your environment to the right temperature...Energy Care works with your thermostat to understand daily temperatures and behavior in your home. It also allows you to input your preference between saving money and changing comfort levels. As a result, you’ll know what to expect each time you walk through the door...when combined with our state-of-the-art AI algorithms, your energy use becomes more efficient than ever. In fact, you’re likely to notice the impact of subscribing to Energy Care quickly.”); (Energy Care can not only use “integrals and heat transfer equations,” “analyzing large volumes of data,” to develop a “more precise understanding of current and expected local weather conditions, and how a home will react to them,” not only to “optimize thermostat settings each day” but also “recalculates settings on-the-fly”); (Energy Care calculates “how</p>
--	--

	long it takes to heat up or cool down; how much heat or cooling is lost through walls, windows, and cracks; and how much energy is required to keep occupants comfortable” based on and in response to the weather.)
--	--

For Claim 8, *see* claim 1 and exemplary citations therein.

For Claim 9, *see* claim 2.

For Claim 10, *see* claim 3.

For Claim 11, *see* claim 4.

For Claim 12, *see* claim 5.

For claim 13, *see* claim 6.

For claim 14, *see* claim 7.